BERNALILLO COUNTY

BOARD OF COUNTY COMMISSIONERS

ORDINANCE NO. 2021-6

DIVISION 10. - WASTEWATER SYSTEMS[5]

AN ORDINANCE REPEALING DIVISION 10, SECTIONS 42-491 THROUGH 42-523 OF THE BERNALILLO COUNTY CODE AND ENACTING A NEW DIVISION 10, REGULATING WASTEWATER SYSTEMS TO PROTECT THE PUBLIC HEALTH AND SAFETY OF THE RESIDENTS IN BERNALILLO COUNTY; PROVIDING FOR THE PERMITTING, EVALUATION, INSPECTION, AND TESTING OF WASTEWATER SYSTEMS; PROVIDING FOR APPEALS; AND PROVIDING FOR PENALTIES

SECTION 1. The Bernalillo County Code is hereby amended to include the following new language in Chapter 42, Division 10, replacing the previous Chapter 42, Division 10, Wastewater Systems, which is hereby repealed:

CHAPTER 42, DIVISION 10 WASTEWATER SYSTEMS

(1) Footnotes:

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Editor's note— Ord. No. 2014-17, § 1, adopted October 28, 2014, repealed the former division 10, §§ 42-491—42-523, and enacted a new division 10 as set out herein. The former division 10 pertained to similar subject matter and derived from Ord. No. 2006-1, § 1, adopted Jan. 24, 2006 and Ord. No. 2011-11, adopted June 14, 2011. See also the Code Comparative Table.

a) Sec. 42-491. - Purpose.

(2) The installation and use of wastewater treatment and disposal systems should not adversely affect public health nor cause the degradation of ground water, surface water, and stormwater quality. Ground water is a vital, finite natural resource that, if contaminated, can pose substantial risks to public health. In Bernalillo County, septic tank effluent has been determined to be a major cause of ground water contamination. Failing or improperly maintained septic systems may also be a source of surface water and stormwater quality degradation. The purposes of this wastewater ordinance are to:

a. protect public health and safety by minimizing the risk of further contamination and degradation of surface waters, ground water and stormwater runoff quality by wastewater systems;

b. protect the quality of ground water and surface waters so that they will be available as a drinking water source for future generations;

c. prevent and abate public health hazards. This division establishes minimum criteria for the design, installation, inspection, evaluation, treatment, and management of commercial and domestic wastewater systems.

(3) (Ord. No. 2014-17, § 1, 10-28-14)

b)

c) Sec. 42-492. - Applicability.

(4)

a. This division applies to all situations where commercial or domestic wastewater is collected, treated, or disposed, including wastewater systems in existence prior to the effective date of the ordinance from which this division is derived, unless the division indicates otherwise.

b. This division applies to all functioning wastewater systems that were installed prior to the effective date of the ordinance from which this division is derived and receive and are designed to receive liquid waste as defined by the New Mexico Environment Department and this ordinance and shall comply with Section 42-501, Wastewater System Permit, Section 504 Wastewater Operating Permits, Section 42-507 Performance Standards, Section 42-508 Design, and Section 42-510, Disposal Systems, at the time they are modified or replaced.

c. Where the provisions of this division differ from those of any other applicable regulations, ordinance, or code, including the most current version of the Uniform Plumbing Code adopted by the County, the more stringent provisions shall prevail.

d. In the event this division is amended or a new wastewater ordinance is adopted, those applications for which a permit or approval has not been issued shall meet the requirements of the amended or new ordinance.

d)

(5) (Ord. No. 2014-17, § 1, 10-28-14)

(6)

e) Sec. 42-493. - General Conditions and Requirements.

a. Where plumbing fixtures exist in a building that is not connected to a sewer system, suitable provisions shall be made for the treatment and disposal of the wastewater by methods satisfactory to the county, as set forth in this division. The system shall provide final effluent that complies with the applicable standards as set forth in this

division and the components of a system shall be constructed of materials approved by the county.

b. No person shall install, modify, own, operate, or use a wastewater system that, by itself or in combination with other wastewater systems, causes a hazard to public health or degrades surface waters, ground water and/or stormwater runoff quality. Compliance with any of the requirements of this division does not preclude the imposition by the county of additional or more stringent requirements necessary to prevent a hazard to public health or the degradation of a body of water.

c. No person shall perform a site characterization or system evaluation, or install, modify, service, abandon, or maintain any portion of a wastewater system without first being deemed qualified by the county to perform such work.

d. The type of on-site wastewater system shall be determined on the basis of site location, lot size, soil, site characteristics and design flow.

e. The owner of a wastewater system shall operate and maintain the wastewater system in a manner approved by the county. Every owner shall be responsible for the storing, treating and disposing of wastewater generated on that property. Transport and disposal of septage shall be in conformance with applicable federal, state and local regulations/ordinances. Disposal of septage shall not cause a hazard to public health or degrade surface waters, ground water and stormwater runoff quality

f. Failing wastewater systems and unpermitted systems shall be brought into compliance with this division by connecting to sewer within 30 days, if sewer is available.

g. If sewer is not available, failing wastewater systems and unpermitted systems shall be brought into compliance by permitting, evaluating, repairing, or replacing the system in accordance with the provisions of this division. The owner shall at a minimum initiate a permit application for operation, repair and/or replacement within 30 days of determination of failure or lack of permit.

(1) The owner shall commence and expedite the permitting, evaluating, repairing and/or replacing of the system to the maximum extent possible, with extensions for completion past 30 days being granted at the sole discretion of county staff based on documentable extenuating circumstances.

(2) In all cases, the permitting, evaluating, repairing, or replacing of the system shall be completed within one year (365 calendar days) of determination. During the interim period, the county may require that corrective actions be taken to mitigate damages.

h. The county may revoke any permit or any approval issued under this division for any false statements, omission of material facts, or misrepresentation of facts on which the permit or approval was granted. The permit or approval may also be

revoked for violations of the permit or discharge plan in the course of installation, construction, modification, maintenance, or operation; or the violations of any conditions attached to the issuance of the permit or approval; or violations of this division.

i. Any property requiring or utilizing a permit under this Ordinance is subject to inspection by the county for purposes of investigating site conditions and ensuring compliance as relates to this Ordinance. Failure to allow inspections/evaluations within 24 hours of having been given notice of intent to inspect the property is a violation of this Ordinance. Failure to allow inspection is also grounds for revocation or denial of a permit. The revocation, the reasons for revocation, and any appeal rights shall be conveyed, in writing, to the owner of the property.

f)

(7) (Ord. No. 2014-17, § 1, 10-28-14; Ord. No. 2018-1, 1-9-18)

g)

h) *Sec. 42-494. - Prohibitions and Limitations.*

a. The use of a cesspool, privy, and/or other method of disposal not addressed in this division as a wastewater system is prohibited, including any such methods existing prior to the effective date of this division.

b. No wastewater system shall be operated or maintained in violation of Section 42-493(e), General Conditions and Requirements, and no wastewater system, regardless of installation date, shall continue to be operated without benefit of permit issued under Section 42-501 or Section 504 of this division.

c. Except as otherwise provided in this division, effluent from a wastewater system that does not meet the requirements set forth in Section 42-507, Performance Standards, is prohibited. The performance standards for effluent shall be met at the end of the treatment component.

d. Except as otherwise provided in this division, the discharge of wastewater to the ground surface is prohibited, whether by means of drains, pipes, hoses, or other means of discharge, including all such methods existing prior to the effective date of this division.

e. The discharge of untreated wastewater to surface water, stormwater systems, drainages, or ground water is prohibited unless otherwise allowed by state or federal permit.

f. Wastewater systems for new construction shall not be installed within designated surface water retention or detention structures or drainage conveyances to such structures, within incised channels, or within active channels or within ditches. Wastewater systems for new construction, or for replacement, repair or

modification of wastewater systems shall not be authorized in drainage easements or in areas of special flood hazards unless authorized by a variance approved by signature of the County Engineer or designee, and by the County Floodplain Administrator or County Drainage Engineer.

(Ord. No. 2014-17, § 1, 10-28-14)

(8)

i) *Sec. 42-495. - Limitations of Responsibility.*

(9)

The issuance of a permit or approval shall not be construed as an assumption by the county of any responsibility or liability for the wastewater system or any component of the system. This article shall not create liability on the part of the county or any officer or employee of the county for any damages that result from reliance on this article or any administrative decision lawfully made under this artlcle.

(10) (Ord. No. 2014-17, § 1, 10-28-14)

j)

k) *Sec. 42-496. - Rules and Ordinances.*

(11) The county may adopt rules and ordinances to implement or augment this division.

a. The county shall not issue a building or zoning permit (inclusive of all technical codes permits) or issue a permit approval associated with any lot which necessitates the use of a wastewater system, unless the county has approved a wastewater system that is designed to accommodate the wastewater flow, contaminant load, and the setback requirements in Section 42-511, Table 7 of this division.

b. The applicant for any building or zoning permit or approval associated with a lot which has, or is proposed to have, a wastewater system shall provide documentation to the county for review by the county, showing the location and setback distances for the proposed use relative to all of the following:

(1) Existing and proposed structures and paved surfaces; and

(2) Existing and proposed driveways and parking locations; and

(3) Existing and proposed easements and rights of way; and

(4) Existing floodplains and drainages, and

(5) Existing and proposed building wastewater and sewer lines; and

(6) Existing and proposed wells and potatble water lines; and

(7) Existing and proposed swimming pools; and

(8) Existing and proposed wastewater system treatment and disposal components.

c. A building shall not be occupied and the county shall not authorize occupancy until the county approves the installation of, and issues a wastewater permit or wastewater operating permit for the wastewater system. Bernalillo County shall not approve any change in occupancy classification or commercial tenancy of a building that uses a wastewater system until the county has reviewed and approved the adequacy of the wastewater system for the proposed change.

d. The county shall not issue a business license until the county has reviewed the application and determined that the use of the wastewater system complies with the requirements of this division.

e. In no event shall the county approve the installation or modification of a wastewater system if the property is being occupied or used in violation of applicable local, land-use planning, or zoning and building requirements.

f. If a sewer system is available, the structure(s) shall connect to the sewer system as required in Section 42-498, Sewers. Nothing in the ordinance shall be construed to conflict with the provisions for individual wastewater systems, community water systems and/or sewers as specified for subdivisions in Chapter 74 Section 99 Wastewater disposal requirements.

(12) (Ord. No. 2014-17, § 1, 10-28-14)

l) Sec. 42-497. - Definitions.

m)

(13) As used in this division, unless the context indicates otherwise:

(14) *Absorption surface* or *adsorption area* means the total surface area of soil at the bottom of the disposal field and not to exceed 36 inches below the leach line. The absorption surface area for gravelless systems shall be calculated in the same manner.

Active channel—A portion of the channel that is somewhat lower than bankfull. The area of the channel being actively modified by average stream discharges.

(15) *Advanced treatment* means any process of wastewater treatment that removes a greater amount of contaminants than is accomplished through primary treatment; advanced treatment may include physical or chemical processes.

(16) *Aerobic treatment unit* means a wastewater treatment unit that can maintain at least two mg/l dissolved oxygen on a continuous basis to provide aerobic biochemical stabilization within the treatment receptacle and any additional oxygen to provide mixing.

(17) *Aggregate* means clean washed gravel (no greater than four percent fines by weight) or clean crushed rock proprietary or other media reviewed by the technical advisory committee and approved by the county; aggregate shall have a minimum size of three-quarters-inch and a maximum size of two and one-half inches and provide no less than 35 percent void space under field conditions; the aggregate shall be durable, inert, and if gravel or rock shall have a hardness value of three or more on the Mohs scale of hardness so it will maintain its integrity, not collapse or disintegrate with time, and not be detrimental to the performance of the system.

(18) *Alternative disposal* means any approved on-site wastewater disposal method used in lieu of, including modifications to, a conventional disposal method; these include but are not limited to, mounds, evapotranspiration beds and pressure dosed systems.

(19) *American Society for Testing and Materials"*, or *ASTM*, is a technical society which develops and publishes national standards for the testing and quality assurance of construction materials.

(20) *Approved* means:

a. A wastewater system that was permitted, constructed and installed in compliance with the standards and requirements of this division and has a current operating permit; or

b. A wastewater system component or product approved by the county; or

c. A person or entity approved by the county to design, install, modify, or maintain wastewater systems or a person approved by the county to perform site or wastewater system evaluations.

n) Area of shallow flooding means a designated AO or AH zone on a community's flood insurance rate map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flow is characterized by ponding or sheet flow. (Or as otherwise defined in Chapter 38 Article II or Article III).

(21) *Arroyo* means a dry wash or draw that flows occasionally, a watercourse (as a creek or stream) in an arid region, or a water carved gully or channel.

(22) *Authorized representative* means the person designated by the property owner to act on his behalf in the application process.

(23) *Available*, as applied to a public sewer system for this division, means

(a) for proposed subdivisions: as addressed in Chapter 74-99 of the Bernalillo County Code and regarding development standards for sewers, and

(b) for all other projects, development, construction, and wastewater system use or replacement subject to this ordinance: an existing sewer collection line or other similarly purposed line or pipe identified by the utility as serviceable and having adequate capacity to accept wastewater generated by the planned or existing residence, establishment, or project, which

(1) extends along the entirety of an abutting property boundary, and to which a service lateral can be directly connected without further expansion /extension of the collector line (though installation of a manhole, pit, or stub in the collector line may be required), or

(2) can be accessed through right-of-ways, or easements acceptable to the County, utility, and granted by underlying property owners, and

(3) for a residence, structure, or project located on a residential or agricultural zoned lot and such an identified sewer line requires extension to provide service, and is within 200 feet of the property line as measured via exiting easements and rights-of-way, or

(4) for an establishment, structure or project located on other than a residential or agricultural zoned lot, and such an identified line requires extension to provide service, and is within 500 feet of the property line as measured via existing easements and rights-of- way, or

(5) for a new residence, new establishment, new structure, or new project regardless of underlying zoning, where the wastewater design flow (either commercial or domestic as defined in this division) exceeds 5,000 gallons per day, or a lot zoned as manufacturing or industrial regardless of wastewater design flow, and is within 1320 feet of the property line as measured via existing easements and rights-of-way, and

(6) is not otherwise varianced with regard to connection to sewer as provided in Section 520 of this division, or by the providing utility.

Bankfull—Describes the volume of flow, and the flow width or depth associated with the bankfull elevation: that point where water fills the channel just before beginning to spill onto the flood plain. The return interval is 1 to 2 years with a 65% chance of occurring each year.

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year. (Or as otherwise defined in Chapter 38 Article II or Article III).

Base flood elevation (BFE) means the elevation shown on the Flood Insurance Rate Map (FIRM) and found in the accompanying Flood Insurance Study (FIS) for Zones A, AE, AH, A1—A30, AR, V1—V30, or VE that indicates the water surface elevation resulting from the flood that has a 1 percent chance of equaling or exceeding that level in any given year - also called the base flood. (Or as otherwise defined in Chapter 38 Article II or Article III).

(24) *Bedroom* means a room designed or designated on submitted plans or drawings for sleeping or a room that could be used to provide sleeping accommodations.

(25) *Biochemical oxygen demand (BOD)* means the rate at which organisms use the oxygen in water or wastewater while stabilizing decomposable organic matter under aerobic conditions.

(26) *Blackwater* means that part of domestic wastewater carried off by toilets, urinals, kitchen drains and utility sinks. The term also includes laundry waste from the washing of material soiled with human excreta.

(27) *Body of water* means all constrained water including water situated wholly or partly within or bordering upon Bernalillo County, whether surface or subsurface, public or private.

(28) *Building sewer* means that portion of the horizontal piping of a drainage system which extends from the end of the building drain located two feet outside the building wall, and which receives the wastewater discharge from the building drain and conveys it to a wastewater treatment unit or approved point of disposal.

(29) *Canal* means a man-made ditch or channel that carries water for purposes other than domestic consumption. Canal is also meant to include acequias and private irrigation conveyances that are open channels, whether lined or unlined.

(30) *Cesspool* means an unlined or a lined and covered excavation in the ground that is not watertight and receives wastewater or other organic wastes. It is designed to retain the organic matter and solids, but permits the liquids to seep through the bottom and sides.

(31) *Clay* means:

(a) A soil separate consisting of particles 0.002 millimeters in diameter; or

(b) The textural class name of any soil that contains 40 percent or more clay, less that 45 percent sand and less that 30 percent silt.

(32) *Cluster system* means a wastewater system that serves more than one lot and receives and is designed to treat liquid waste as defined by the New Mexico Environment Department.

(33) *Coarse sand* means soil comprised of 25 percent or more of soil particles 0.5 to 2.0 mm in diameter and less than 50 percent of any other grade of sand.

(34) Composting Toilet (also biological toilet, dry toilet) means a type of dry/waterless toilet that provides an enclosed environment that allows aerobic decomposition of human waste and excreta by a biological composting process. This process leads to the decomposition of organic matter and turns human waste into compost-like nitrogen-rich material similar to humus, potentially suitable for use as soil amendment and fertilizer, but does not destroy all pathogens, Only National SanitationFoundation (NSF) – certified composting toilets are considered as an acceptable wastewater system within Bernalillo County.

(35) *Conventional disposal* means a subsurface soil absorption system with gravity distribution of the effluent, with or without a lift station, constructed in accordance with the standards set forth in this division, including trench or bed absorption areas and seepage pits.

(36) *Conventional treatment* means a septic tank where primary treatment occurs.

(37) *Conventional treatment system* means an on-site wastewater system utilizing both conventional treatment and conventional disposal.

(38) *Community system* means a wastewater system that serves more than one lot and receives or is designed to treat liquid waste as defined by the New Mexico Environment Department.

(39) *County* means Bernalillo County Natural Resource Services program or its successive programs, offices, or departments and/or its higher organization management structures or successors.

County Drainage Engineer (or County Surface Water Hydrologist) means a staff professional engineer designated by the County Engineer to exercise primary responsibility for drainage control, flood control and erosion control matters assigned to the office of the county engineer. (Or as otherwise defined in Chapter 38 Article II or Article III).

County Engineer means the Deputy County Manager for Public Works, if a registered engineer, or the Director of the Technical Services department within public works, if a registered engineer, or the highest ranking registered engineer within that department or successor organization. (Or as otherwise defined in Chapter 38 Article II or Article III).

(40) *County Manager* means the county manager of Bernalillo County or his designated representative(s).

(41) *D-box* means a watertight distribution box with a single inlet and several individual outlets used to divide the wastewater effluent flow among multiple distribution lines.

(42) *Days* means calendar days unless otherwise indicated.

(43) *Degrade a body of water* means to reduce the physical, chemical, or biological qualities of a body of water and includes but is not limited to, the release of material that could result in the exceeding of standards established by 20.6.4 NMAC, Standards for Interstate and Intrastate Surface Waters, by 20.6.2 NMAC, Ground and Surface Water Protection and 20.7.10 NMAC, Drinking Water.

(44) *Department* means the Bernalillo County Public Works Technical Services department, or its successive programs, offices, or departments.

(45) *Design flow* means the flow rate for which an on-site wastewater system must be designed in order to assure acceptable system performance, assuming the use of conventional plumbing fixtures.

(46) *Designer* means the person or entity responsible for designing the wastewater system and certifying the installation of the system.

(47) *Director* means the Bernalillo County Technical Services Director or the successive departments designated director; or in the director's absence, the person designated to act as the director during his absence; or for the purposes of appeal hearings, a technically-qualified person designated by the director to conduct such hearings.

(48) *Discharge plan* means the discharge plan as defined and issued by the New Mexico Environment Department, Ground Water Quality Bureau.

(49) *Disinfected* or *disinfection* means the use of any process designed to effectively kill most micro-organisms contained in wastewater effluent, including essentially all pathogenic (disease causing) organisms, as indicated by the reduction of the fecal coliform or more specifically reduction of E. Coli concentration to a specific level; these processes include, but are not limited to, the use of chlorine, ozone, and ultraviolet light.

(50) *Disposal system* means the dispersal of effluent through a system of open-jointed or perforated piping, approved alternative distribution units, or other disposal facilities designed

to distribute effluent for filtration, oxidation and absorption by the soil within the upper zone of the soil or a system which is used to evaporate the effluent.

(51) *Disposal area* means the area of absorption surface.

(52) *DO* means dissolved oxygen.

(53) *Drainage ditch* / ditch means an unlined trench dug for the purpose of draining water from the land or for transporting water for use on the land.

Drainage Plan means a short, detailed plan prepared in graphical format with or on a detailed grading plan addressing onsite and off-site drainage control, flood control and erosion control issues for lots or parcels of less than five acres. (Or as otherwise defined in Chapter 38 Article II or Article III)

(54) *Drainline* means a perforated pipe or other materials used to discharge wastewater effluent to the disposal system.

(55) *Dwelling unit* means a room or suite of rooms with kitchen and bath facilities designed as a unit for occupancy by one family.

(56) *Easement* means the right or privilege that a person or persons may have in another's land, such as right of passage; commonly associated with road and utility corridors.

(57) *Edge of a water course, canal or arroyo* means that point of maximum curvature at the upper edge of a definite bank or, if no definite bank exists, the highest point where signs of seasonal high water flow exist.

(58) *Effluent* means the discharge from the final treatment unit.

(59) *Effluent disposal wells* means a prohibited method of disposal consisting of a drilled, driven or bored shaft or dug hole with depth greater than any surface dimension, used for subsurface emplacement of wastewater, including, but not limited to, abandoned water supply wells, irrigation wells and test holes, but excluding seepage pits used as disposal systems.

(60) *Engineer* means a professional engineer licensed in the State of New Mexico.

(61) *Establishment* means multi-family housing, an apartment, a condominium or townhouse complex, a mobile home park or recreational vehicle park, a commercial or institutional development, or places of business or assembly. An establishment includes all buildings or structures and the land pertaining thereto.

(62) *Evaluator* or *third-party evaluator* or *system evaluator* means a person who, as described in this division, is capable of evaluating a system to determine functionality and has demonstrated competence in the inspection of wastewater systems.

Existing construction means, for the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM, or before January 1, 1975, for FIRMs effective before that date. The term "existing construction" may also be referred to as "existing structures." (Or as otherwise defined in Chapter 38 Article II or Article III).

(63)

(64) *Existing lot* means a lot in existence prior to the effective date of this division.

(65) *Existing system* means a wastewater system in existence prior to application submittal.

(66) *Experimental system* also referred to as *innovative technology* means, without limitation, any on-site wastewater system utilizing a method of wastewater treatment technology, processes, equipment or components that are not fully proven in the circumstances of their intended use, but based upon documented research and demonstration, appear to offer benefits which outweigh the potential risks of failure, or a method of disposal that is not currently approved by the county; experimental systems shall be submitted for review to the wastewater technical advisory committee (TAC) who shall recommend the system for full approval, recommend approval with conditions or reject the proposed system; final approval of experimental systems shall be at the discretion of the secretary.

(67) *Failure* or *failing* describes a wastewater treatment or disposal system which results in the discharge of effluent that does not meet the requirements of this division.

(68) *Fecal coliform* means bacteria used as an indicator organism and its presence is taken as an indication that pathogenic organisms may be present.

Flood or *flooding* means a general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow of inland waters.

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

(Or as otherwise defined in Chapter 38 Article II or Article III)

Flood elevation study means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. (Or as otherwise defined in Chapter 38 Article II or Article III).

Flood hazard area means an area subject to inundation from the 100-year design storm runoff. (Or as otherwise defined in Chapter 38 Article II or Article III).

Flood insurance rate map (FIRM) means the official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community. (Or as otherwise defined in Chapter 38 Article II or Article III).

Floodplain or *floodprone area or flood hazard area* means any land area susceptible to being inundated by water from any source. See the definition of flooding. (Or as otherwise defined in Chapter 38 Article II or Article III).

Floodplain administrator means an assigned public official certified in floodplain administration per NM State statute 3-18-7 NMSA 1978 (Or as otherwise defined in Chapter 38 Article II or Article III).

Flood proofing means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents. (Or as otherwise defined in Chapter 38 Article II or Article III).

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in the order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. (Or as otherwise defined in Chapter 38 Article II).

(69) *Functioning wastewater system* means a wastewater system that is operating as designed and as permitted by the county. Systems installed prior to the effective date of this division shall, at a minimum, meet Class 1 Standards as shown in Table 1, Performance Standards.

Grading Plan means a plan describing the existing topography and proposed grading, including retaining wall locations and details, interfaces with adjacent properties, streets, alleys and channels, referenced to mean sea level (1929 or 1988 datum) such as city benchmark or NMSHTD benchmark, and showing sufficient contours, spot elevations and cross sections to allow a clear understanding by reviewers, contractors and inspectors. (Or as otherwise defined in Chapter 38 Article II or Article III).

(70) *Gravels* means, for purposes of soils classification, a soil separate consisting of particles greater than two mm in diameter.

(71) *Graywater* means that part of domestic wastewater that is not blackwater.

(72) *Ground water* means interstitial water that occurs in saturated earth material.

(73) *Hazard to public health* means the indicated presence, in water or soil, of chemical, biological, or other agents under such conditions that they may adversely impact human health or safety.

(74) *Holding component* means a watertight receptacle constructed to contain wastewater. It does not mean holding tanks installed in recreational vehicles.

(75) *Holding tank* means a non-discharging watertight tank designed to receive and temporarily retain wastewater for periodic pumping and disposal. Holding tanks may be stand-alone structures or may be connected to a building's plumbing system. Holding tank does not mean holding tanks installed in recreational vehicles and does not mean tanks used for the capture of rainwater or stormwater runoff intended for domestic water reuse or landscape irrigation. Portable toilets are a subset of holding tanks.

(76) *Household hazardous waste* means a wide range of household products that have the characteristics of hazardous waste when discarded, including but not limited to, pesticides and herbicides, oil-based paints and stains, automobile fluids (antifreeze, motor oil, transmission, steering and brake fluids, gasoline), pool chemicals and darkroom chemicals.

(77) *Hydraulic flow* means volume per unit time.

(78) *Hydraulic loading rate* means the amount of material applied to a wastewater or disposal component per unit area or unit volume.

(79) *Imminent hazard to public health or safety* means any situation with the potential to immediately and adversely impact or threaten public health or safety.

(80) *Incinerating Toilet* means a self-contained toilet unit consisting of a traditional commode-style seat connected to a holding tank plus a gas-fired or electric heating system to incinerate waste products deposited in the holding tank. Such toilets produce a fine, sterile ash

that is unsuitable for further use. Only National Sanitation Foundation (NSF) – certified incinerating toilets are considered as an acceptable wastewater system within Bernalillo County.

Incised Channel means a stream channel in which the bed has dropped and as a result, the stream is disconnected from its floodplain. Incised channels are often referred to as degraded channels.

(81) *Industrial process wastewater* means toxic wastewater, excepting the following: Human excreta; used water from showers, washbasins and dishwashers; and food preparation waste; any wastewater generated in a commercial activity that contains the materials prohibited by subsection A of 20.7.3.304 NMAC is industrial process wastewater.

(82) *Installer* means the person responsible for installing or modifying a wastewater system. An installer shall obtain an installer's certificate as described in section 42-499, Certification.

(83) *Inspector* means a person employed by the State of New Mexico Environment Department or by Bernalillo County, or contracted by the same, and who is competent in the physical examination and evaluation of on-site wastewater systems.

(84) *Invert* means the lowest portion of the internal cross section of a pipe or fitting.

(85) *Limiting layer* means an impervious formation, a type Ia or type IV soil described in Table 4, bedrock or seasonal high ground water table.

(86) *Liner* means a manufactured substance that restricts seepage to no more than 10^{-7} cm/sec. Over the design service life of the lined unit; manufactured liners must have a minimum single-ply thickness of 20 mils and have no leaks.

(87) *Load* or *loading* means the biological or chemical load received by a wastewater system; calculated as flow times concentration.

(88) *Lot* means a legal lot of record as described in a Bernalillo County subdivision ordinance.

(89) *Lot size* means the area of a parcel plus or minus the area of any liquid waste disposal easements granted to or by another lot, respectively. Lot size shall be measured to the nearest hundredth of an acre.

(90) *Low pressure pipe (LPP) disposal system* means a pressurized distribution system placed in shallow, narrow trenches.

(91) *Maintenance contract* means a contract between the wastewater system owner and a maintenance service provider in which the maintenance service provider agrees to provide periodic inspections in regards to the operation, maintenance and repair of the system.

(92) *Maintenance service provider* means a public entity, company or individual in the business of maintaining wastewater systems according to manufacturers' specification.

(93) *May* means discretionary, permissive or allowed.

(94) *Management plan* indicates how a system shall be operated and maintained.

(95) *Modification or modify* means:

(a) To change the method of wastewater treatment or disposal;

(b) To increase the size of a wastewater system;

(c) To alter the horizontal or vertical location of the wastewater system;

(d) To increase the amount of design flow or load received by the wastewater system above the original design flow or load;

(e) To remove or replace component materials in a disposal system; or

(f) To change the size or boundaries of a lot which contains a wastewater system so that the total design flow for the lot exceeds the total design flow limitations.

(96) *MPN* means most probable number of organisms present.

(97) *Native soil* means unsaturated soil which has been deposited onto a site by the actions of nature and which has not been significantly disturbed or altered by the activities of man.

New Construction means structures and improvements, including remodeling and renovation, for which the "start of construction" commenced on or after the effective date of this ordinance, and/or for which a new permit is required under Chapter 10 of the Bernalillo County Code and/or under this division, and/or which affects the design flow or total flows to an existing wastewater system.

(98) *Non-discharging system* means a watertight on-site wastewater system that does not discharge to the soil, including, but not limited to, holding tanks and lined evapotranspiration systems.

(99) *Obstructed land* are those areas on a lot or property used for such purposes as pools, concrete slabs, buildings, driveways, parking and similar areas which prohibit, hinder, or affect the installation, operation, or maintenance of a wastewater system.

(100) *Onsite system* means a wastewater system that is wholly located on a single lot and only serves structures on that lot.

(101) *Operating permit* means a permit, issued by the county, which allows the operation of the wastewater system.

(102) *Operator* means the person who owns a wastewater system that receives and is designed to treat 2,000 gal/day or less, or the person who operates a wastewater system treating over 2,000 gal/day.

(103) *Ordinance* means division 10 of chapter 42, Health and Sanitation, of the Bernalillo County Code unless otherwise indicated.

(104) *Owner* is the legal owner(s) of the property.

(105) *Partially treated wastewater* means wastewater that does not meet Class 1 Standards as shown in Table 1, Performance Standards.

(106) *Performance standards* means specific conditions or standards that shall be achieved. Performance standards define the end result, but not the means of achieving it.

(107) *Permittee* means the individual, firm, partnership, or corporation duly licensed or authorized by the Construction Industries Division of the State of New Mexico and approved by the county to install a wastewater system.

(108) *Person* means any individual, partnership, firm, public or private corporation, association, trust, estate, governmental entity, agency or institution, any other legal entity or their legal representatives, agents, or assigns.

(109) *Portable toilet* means a subset of holding tanks (i.e. they have a watertight receptacle for holding waste) that are not designed to be attached to a building's permanent sanitary waste plumbing, sizing is a function of manufacture and transportability rather than design flow, do not use incineration or composting to address wastes, do require pumping to dispose of septage, and are by definition intended for temporary use and ease of relocation.

(110) *Potable water* is water used for drinking, culinary or domestic purposes.

(111) *Potable water line* means any water line that is connected to a potable water supply source. The term does not include an irrigation line with any of the following types of backflow devices:

(a) Irrigation systems into which chemicals are not injected, any atmospheric or pressure vacuum breaker, or double check valve, or detector check assembly; or

(b) Irrigation systems into which chemicals such as fertilizers, pesticides, or herbicides are injected, any reduced pressure backflow preventer.

(112) *Privy* means a receptacle for non-liquid-carried excreta which is directly discharged to the soil.

(113) *Product* means a combination of components comprising a unit which treats or disposes of wastewater.

(114) *Public sewer* means a sewer system owned or operated by a governmental, quasi-governmental agency, or authority.

(115) *Replacement area* means an area within a lot designated to allow future construction of a replacement disposal system.

(116) *Residence* means a structure that contains four or fewer dwelling units.

(117) *Sand* means:

(a) A soil separate consisting of individual rock or mineral fragments that range in diameter from 0.05 to 2.0 millimeters; or

(b) The textural class name of any soil that contains 85 percent or more sand and not more than 10 percent clay.

(118) *Scum* means the accumulated floating solids generated during the biological, physical or chemical treatment, coagulation, or sedimentation of wastewater.

(119) *Seasonal high ground water table* means the highest level to which the upper surface of ground water may be expected to rise within 24 consecutive months. Seasonal

high ground water levels shall be determined by the county and shall be based on the best documented evidence available to the county at the time of installation or modification.

(120) *Secondary treatment* means a wastewater treatment process used to convert dissolved or suspended materials into a form more readily separated from the water being treated; the process is commonly a biological treatment process followed by settling and clarification resulting in a reduction of the five-day biochemical oxygen demand (BOD5) and total suspended solids (TSS) concentrations to a level specified in Table 1.

(121) *Seepage pit* means a type of absorption system that uses a vertical, cylindrical, underground receptacle so constructed as to allow the disposal of effluent by soil absorption through its walls.

(122) *Septage* means a mixture of sludge (solids separated from liquids), fatty materials, human feces, and wastewater removed during the pumping of a wastewater treatment unit.

(123) *Septic tank* means a watertight receptacle constructed to promote separation of solid (sludge), liquid (supernatant), and scum components of wastewater, to provide limited digestion of organic matter, to store solids, and to allow clarified liquid to discharge for further treatment and disposal.

(124) *Setback distance* means the distance measured by a straight horizontal line between the on-site liquid waste system, its designated replacement area, or portion thereof, and the object being considered.

(125) *Settleable solids* are those solids that will settle to the bottom of an Imhoff Cone in a 60-minute period.

(126) *Sewer system* or *sewer* means a wastewater collection system which includes, but is not limited to: the trunks, arterials, channels, conduits, manholes, pumps, pumping stations, piping, lines, and other appurtenances necessary to collect wastewater from a community, water district, corporation, company, or other entity that produces domestic sewage or a majority of domestic sewage mixed with other wastewaters treatable in a wastewater treatment facility.

Sewer collector line means the sanitary sewer line to which a sewer service lateral may be connected, and designated by the utility as a collector line or other type of line serving that purpose.

Sewer service lateral means the sanitary sewer line that runs from the property to the sewer collector line.

(127) *Shall* means mandatory.

(128) *Silt* means:

(a) A soil separate consisting of particles between 0.05 and 0.002 millimeters in diameter; or

(b) The textural class name of any soil that contains 80 percent or more silt and less than 12% clay.

(129) *Soil* means sediment or other unconsolidated accumulations of mineral particles that may or may not contain organic material and that have filtering properties.

Special flood hazard area (also area of special flood hazard) means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed rate making has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AO, AH, A1—30, AE, A99, AR, AR/A1—30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1—30, VE or V. (Or as otherwise defined in Chapter 38 Article II or Article III)

(130) *Split flow* means a building drain for the conveyance of wastewater that is designed to capture two wastestreams, one stream from the toilet and the other stream from all other fixtures including kitchen plus all graywater; for the purpose of reducing the total nitrogen discharged from the building; the split-flow system shall consist of a holding tank for the toilet waste only and a disposal system for the remainder of the waste.

(131) *Startup* means the period of time needed for the wastewater system to become functional.

(132) *Stormwater system (or alternately municipal separate storm sewer system (MS4))* means the system of stormwater conveyances and drainages owned, operated, or under the control of the County, or any such facilities or conveyances owned, operated or under control of the county to which or from which the County discharges or receives discharges of stormwater. The stormwater system includes all manner of natural and man-made, lined or unlined, ditches, arroyos, channels, canals, inlets, drains, and piping, inclusive of MRGCD facilities allowed for such use, that are used to convey stormwater. The term is used interchangeably to refer individually to the County's MS4 specifically and also collectively to that of the County and its MS4 co-permittees. This includes retention or detention areas designed to contain standing or flowing water for less than 96 hours after a rainfall.

(133) *Subdivision* means the division of a surface area of land, including land within a previously approved subdivision, into two or more parcels for the purpose of sale, lease or other conveyance or for building development, whether immediate or future.

(134) *Suitable soil* means a soil, whether naturally occurring or introduced, that will treat the primary effluent effectively and act as an effective filter and remove organisms and suspended solids prior to the effluent reaching ground water, bedrock or a limiting layer, and that will provide adequate transmission to prevent a failed system. Suitable soils are classified as type Ib, II, or III soils as classified in Table 4.

(135) *Surface water* means a recognizable body of water, including swamp or marsh areas, wetlands, and natural or constructed ponds contained within a recognizable boundary. This does not include retention or detention areas designed to contain standing or flowing water for less than 96 hours after a rainfall.

(136) *System* means a wastewater system.

(137) *Tank* means a watertight receptacle constructed to contain wastewater.

(138) *Temporary* means a single period or an accumulation of periods in one location not exceeding 120 total days in any 365-day period for recreational use and not exceeding 30 total days in any 365-day period for other uses except as stated otherwise in this division.

(139) *Tertiary treatment* means additional treatment beyond secondary treatment standards, specifically, the reduction in the total nitrogen concentration.

(140) *Test hole* means a hole dug in the proposed disposal field area a minimum of seven feet deep or four feet below the bottom of disposal field, whichever is greater, and a minimum of two feet wide; the test hole shall be sufficient to examine the soil visually for type, structure, mottling, impervious layers and other soil characteristics, and to determine the seasonal high water table level; a soil boring may be used to determine the soil characteristics and soil depth.

(141) *Total days* means accumulated days (total days, sequential, intermittent, and/or consecutive days or any manner of combined days and occurring within any 365 calender-day period) and any includes days "placed on site" whether or not actually utilized and whether or not locked to prevent use during non-operational hours or periods).

(142) *Total flow* means the sum of the design flows for all wastewater systems on a lot.

(143) *Total nitrogen* or *TN* means the combined organic nitrogen, ammonia, nitrite and nitrate contained in the wastewater or effluent.

(144) *Toxic, hazardous, industrial wastewater*, or *industrial process wastewater* include, but are not limited to: these terms as defined by the State of New Mexico, wastewater carried off by floor drains, utility sinks, and equipment drains located in buildings in industrial or manufacturing areas, wastewater from commercial laundry facilities with more than four self-service machines, and wastewater resulting from car and truck washes.

(145) *Treatment component* means a product which is a component of the wastewater system where removal, reduction, or alteration of the objectionable constituents of wastewater is designed to occur. It may include a holding component but does not include native soil.

(146) *TSS* means total suspended solids, which are those solids that did not settle but remained suspended in the solution and can be filtered.

(147) *UL* means Underwriters Laboratory.

(148) *Uniform Plumbing Code* or *UPC* means the 2009 Uniform Plumbing Code, as published by the International Association of Plumbing and Mechanical Officials (IAPMO) as amended and adopted by the County, or the most current and successor versions as amended and adopted by the County.

(149) *Variance* means an administrative procedure authorizing the issuance of a permit or use of a system that does not meet the specific requirements of the ordinance from which this division is derived but which meets the intent of the ordinance.

(150) *Wastewater* means the liquid- or water-carried wastes removed from residences, institutions and other establishments, including bath and toilet wastes, laundry waste, and kitchen waste but not including toxic, hazardous, or industrial waste.

(151) *Wastewater, commercial* means non-toxic, non-hazardous wastewater from commercial establishments, including but not limited to commercial food preparation operations, including commercial laundry facilities with no more than four machines, that is similar in composition to domestic wastewater, but which may have one or more of its constituents that exceed typical domestic concentration ranges.

(152) *Wastewater, domestic* water or liquid-carried waste from plumbing fixtures, appliances, and devices such as toilets, bath, laundry, and dishwashers, and with influent and effluent concentrations typically less than defined as wastewater, high strength.

(153) *Wastewater, high strength* means wastewater influent have BOD5 greater than 300 mg/L; and/or TSS greater than 200 mg/L, and/or fats, oils, and grease greater than 50 mg/L; and/or greater than 80 mg/L nitrogen; and wastewater effluent having BOD5 greater than 170 mg/L; and/or TSS greater than 60 mg/L; and/or fats, oils, and grease greater than 25 mg/L; and/or greater than 60 mg/L nitrogen.

(154) *Wastewater system* means a system that collects, treats, or disposes of wastewater and is not subject to a National Pollutant Discharge Elimination System (NPDES) permit. This includes, but is not limited to: a subsurface, surface, mound or other disposal system; a holding tank; an aerobic treatment unit or other treatment unit; NSF-certified composting or incinerating toilets, a graywater system tank or disposal system; a septic tank; a grease interceptor; a dosing tank; a solids or effluent pump; or other treatment system.

(155) *Wastewater system permit* means a permit, issued by the county, which allows the construction and operation of a wastewater system.

(156) *Water table elevation* means the upper surface of the ground water or that level below which the soil or underlying rock material is saturated with water. Water table elevation is measured from the soil surface downward to the upper level of saturated soil or to the free water level.

(157) *Watertight* means the seepage from the tank or unit shall be no more than 0.01 gallons per square foot of submerged area per day.

o)

(Ord. No. 2014-17, § 1, 10-28-14)

p)

q) *Sec. 42-498. - Sewers.*

a. If a sewer system is available, any new structure requiring wastewater disposal shall be connected to the sewer system prior to the structure being occupied. If a sewer system is available to a proposed subdivision, every lot in that subdivision shall be provided access to the sewer at the property line of each lot as required by Chapter 74 Section 99 of the Bernalillo County Code.

b. If a sewer system is available, a failing wastewater system or unpermitted wastewater system shall be abandoned and the structure shall be connected to the

available sewer within 30 days of determination of failure or determination of lack of permit, per Section 42-493(f) of this division. Any structure without a current acceptable evaluation and current operator permit or evaluation permit on file with the county shall be deemed an unpermitted system and specifically including those systems addressed under Section 518 of this division.

c. If a sewer is available, any lot that has a structure that has, or is generating wastewater shall be connected to the sewer system within one year (365 calendar days) of the availability of sewer unless the wastewater system was installed and permitted prior to the sewer system becoming available, is fully functional, and meets the requirements of Section 42-507 Performance Standards of this division, without a variance, or unless excepted in section 42-520 of this division. Such wastewater systems are not required to connect to the sewer system until the system fails.

d. If sewer is not available for systems under paragraphs (a), (b), or (c) immediately above, the system must be evaluated and, as needed, repaired or replaced.

e. If the subject property is part of, or adjacent to, a subdivision action or utility expansion project such that a defined, scheduled, and funded utility expansion project will make sewer available to the property within five years, the property owner may be allowed to continue to operate the system under a variance issued by this department.

(1) The property shall initially be issued a notice of violation for operation of an unpermitted system, with the requirement that the property owner enter in a stipulated variance.

(2) the County may stipulate in the variance that the owner conduct a current system evaluation to verify that the system does not pose an imminent threat to persons, property, or the environment;

(3) the County may stipulate that any deficiencies be addressed or repairs be implemented; and

(4) the County may stipulate further actions that the owner must take to ensure that continued operation of the system does not pose any such threat.

(5) The variance shall indicate that the system must be abandoned and the property connected within 30 days of the sewer being made available to the property.

f. Existing structures connected to sewers shall keep service laterals in functional condition, shall not allow sewerage to surface or pond on the property or migrate from the property, and shall promptly affect any necessary repairs to ensure proper functioning of the sewer lateral / building sewer leading from the structure to the point of connection to the sewer collector.

g. Approved connections and service laterals shall be built to the utility's specifications and requirements as stated or referenced in the utility's serviceability letter or guidance documents.

(Ord. No. 2014-17, § 1, 10-28-14)

r) Sec. 42-499. - Certifications.

(158) All State of New Mexico Environment Department certification requirements and criteria shall apply in Bernalillo County.

a. Technical product review and approval shall be in accordance with NMSA 1978, § 9-7A-15. All proprietary treatment systems proposed for secondary or tertiary treatment must be certified by the technical advisory committee for that level of treatment. Other types of systems may be considered for installation on a case-by-case basis if previously certified by the National Sanitation Foundation.

b. Homeowner self-installer certification

(1) A homeowner self-installing a wastewater system must become qualified by passing an exam administered by Bernalillo County Natural Resource Services or its successor departments. Homeowner installer exams administered by the New Mexico Environment Department are not accepted as certification by Bernalillo County nor may a Bernalillo County certification be used for homeowner self-installation outside of the unincorporated areas of Bernalillo County.

(2) The homeowner shall pay a non-refundable test fee at the time of application for the exam and shall pay separately for each testing attempt. The homeowner may attempt the exam no more than two times in a given calendar year, and the attempts must be completed within a 90-day period.

(3) The guidelines for the testing program, testing procedures, scheduling of exam times, test question development, and level of staff assistance to the applicant will be at the discretion of the County and will be addressed in written departmental testing guidelines approved by the Department Director, and provided to the applicant prior to acceptance of a testing application or payment of a testing fee.

(4) The test fee is a separate fee and will not be credited or paid in lieu of the permit fee. A separate wastewater permit fee must be paid at the time of wastewater and/or variance permit application.

(5) A qualified homeowner must apply for a separate wastewater permit and/or variance fee as appropriate to self-install or modify a conventional on-site liquid waste treatment and disposal system serving the qualified homeowner's personal residence in accordance with Section 501 of this division as well as

subsection C of 20.7.3.401 NMAC. Alternative wastewater systems may not be self-installed.

a) A qualified homeowner shall not install or modify an on-site liquid waste system serving a rental unit, or other property that is not the qualified homeowner's personal residence.

b) A qualified homeowner may install no more than one conventional liquid waste system during a 12-month period.

c) A qualified homeowner who self-installs a system shall not compensate any person to perform any phase of the system construction, unless that person holds a valid and appropriate classification of contractor's license issued by the New Mexico construction industries division.

d) A homeowner self-installer will be treated is a manner similar to other licensed installers with regard to assistance from staff regarding the permit process and interpretation/application of ordinance provisions, compliance with ordinance requirements, and liability for reinspection fees. Technical assistance with design or construction is not provided by county staff.

c. Third party / independent system evaluators.

(1) Evaluations of liquid waste systems by a third party qualified evaluator and review by the county are required prior to property transfers and for wastewater systems greater than 30 years in age.

(2) An evaluator may not evaluate their own system, a system owned by their employer or of an employee of that company, or for any other party that would represent a conflict of interest for the evaluator as determined by the County.

(3) An evaluator will be considered qualified if they provide or demonstrate any of the following:

a) Qualification pursuant to subsection C of 20.7.3.904 NMAC;

b) Licensure as a professional engineer in the area of mechanical engineering, civil engineering, or environmental engineering and not operating beyond their area of professional expertise and experience as determined by the County;

c) A valid and appropriate classification of licensure by the construction industries division of the regulation and licensing department;

d) Certification as a registered environmental health specialist (REHS) or a registered sanitarian (RS);

e) Accreditation in on-site wastewater inspection by the National Sanitation Foundation (NSF); certification by the National Environmental Health Association (NEHA) as an installer of on-site wastewater treatment systems;

f) Demonstration of a similar accreditation or certification or a combination of training and experience as approved by the New Mexico Environment Department or the County.

d. Maintenance service providers (MSP) for conventional and advanced treatment systems.

(1) The MSP shall possess a valid and appropriate CID license when required for the specific activities performed and have at least one of the certifications listed below:

a) Operator certification for small advanced wastewater systems, or higher, from the State of New Mexico; or

b) Certification by the manufacturer for the proprietary unit being maintained, or certification at an acceptable level as a wastewater operator from another state; or

c) Appropriate certification based on other credentials as approved by the county, such as certification by the National Association of Waste Transporters (NAWT) or equivalent for conventional systems.

(2) Maintenance service providers (MSP) shall at a minimum:

d) Be trained in the proper operation and maintenance of the system.

e) Have the ability to sample the unit in accordance with approved sampling methods under this part.

f) Have in place a standardized quality assurance/quality control (QA/QC) plan.

g) Properly maintain and sample all systems for which they have an active maintenance or sampling contract.

h) Be able to respond to emergency situations within 48 hours of being notified.

i) Use a maintenance contract that, at a minimum, meets, the requirements of this division and conditions for wastewater permit.

(Ord. No. 2014-17, § 1, 10-28-14)

s)

t) Sec. 42-500. – RESERVED

(Ord. No. 2014-17, § 1, 10-28-14)

u) Sec. 42-501. - Wastewater System Permit.

a. *Permit requirements.* The installation or modification of a wastewater system shall not commence or continue unless the installer possesses a valid wastewater system permit as provided in this division. The applicant is responsible for all information supplied to the county. The signed application, site evaluation, system design plans, and other information submitted with the application serve as the basis upon which the county determines the issuance or denial of a permit.

(1) A wastewater permit is required for:

a) the installation of a wastewater system; or

b) the modification of a wastewater system; or

c) the replacement or addition of a wastewater treatment, holding, or disposal component.

(2) A wastewater permit is not required for:

a) servicing or for replacing mechanical or electrical parts of an approved wastewater system with like kind parts; or

b) pumping of septage from a system; or

c) making minor structural corrections/repairs (such as baffles, observation ports, risers, filters, valves, pumps or D-boxes).

b. Application and submittals for wastewater system permit. The application shall be made in a format prescribed by the county. An application shall not be deemed complete until all information outlined below is provided. The application, plans and specifications, and other documentation submitted for review shall be clear, legible, and of a permanent nature. The owner's name and the site address shall be noted on all documents submitted to the county.

c. *Application.* The property owner or the authorized representative shall submit the application to the county. An application shall be completed in full, signed by the owner or the owner's authorized representative, and accompanied by all required exhibits and fees. If the owner of a property uses an authorized representative, a signed statement from the owner of the property assigning authority for the representative to act on the owner's behalf during the application review process shall accompany the application.

(1) The owner's name, address, and phone number;

(2) The designer's name, address, phone number;

(3) The site address;

(4) The legal description;

(5) The Uniform Property Code for the lot;

(6) The signature of the person who is responsible for the design and installation of the wastewater system together with the date of signature. If the designer is required by this division to be a professional engineer, the engineer's license number shall also be noted on the plans.

d. *Plans and specifications.* Plans and specifications for all installations and modifications shall be submitted to the county and shall include, but not be limited to, the following:

(1) Floor plans showing the number of bedrooms, the number of sinks and toilets, the building sewer, and any additional information as appropriate shall be shown on the site plan.

(2) Details and configuration layouts depicting how the design is to be constructed and how the design is to perform relative to the treatment, disposal, or holding of wastewater; and

(3) Specifications including a description of the materials to be used,

(4) If a grading and drainage plan is available or in preparation for the site, the grading and drainage plan shall be submitted as part of the application if a designated floodplain is present within the parcel boundaries. The grading and drainage plan shall also include the location of the proposed wastewater system with respect to designated floodplains and drainage ways.

(5) The county may require that the plans for a commercial wastewater system be designed and submitted to the county for review under the seal of a professional engineer licensed in the State of New Mexico. Floor plans for the structure(s), square footage of the structure(s), and the occupant loads per area of use shall be submitted. Also, the minimum and maximum daily hydraulic flow, and the influent BOD and total nitrogen load associated with the wastewater to be treated.

e. *Site plan.* All information that is necessary to determine the total wastewater flow and proper setbacks shall be submitted with the application. The applicant shall be responsible for the measurements to all features, including pertinent features (Section 511, Table 7 of this division) within 100 feet of the wastewater system. The site plan will show:

(1) a north arrow and map scale,

(2) the minimum scale of the site plan shall be one inch equals 20 feet. If the lot is five acres or greater, the applicant may draw a minimum one acre portion showing all required features. The applicant shall also show the location of that one-acre or larger portion inside the total site,

(3) property boundaries with dimensions and recorded or planned easements;

(4) locations of any existing or proposed residences, buildings, swimming pools, driveways, paved surfaces, and/or obstructed areas,

(5) the wastewater treatment and disposal system components; the slope of the area where the wastewater system will be located and any existing or proposed wells, potable and non-potable water lines (including valves),

(6) the distance from the wastewater treatment system to each of the pertinent features. If the features are within 100 feet of the wastewater system, the actual or estimated distance to the feature shall be shown,

(7) the location of any public drinking water well within 200 feet of the wastewater system shall also be shown, with the distance indicated from the system to the well,

(8) the designated disposal system replacement area,

(9) the extent of floodplains, drainage features, acequias or canals on or adjacent to the property, filled areas and/or surface waters,

(10) for those parcels within a floodplain: any delineated floodplain areas, any designated local flood control authority easements, and any arroyo or drainage with a designated flow rate in excess of 30 cfs under the RIT hydrologic maps for the North Albuquerque Acres areas. (Failure to provide this information at time of application shall be considered as an incomplete application, and the application shall not be accepted for review),

(11) any other spatial information deemed pertinent by the County

f. Site evaluation. The determination of suitability of a lot, property, or subdivision for the use of a wastewater system shall be by persons approved by the county.

(1) Completed field data from each test pit and results of the site evaluation shall be submitted with the application.

(2) The address shall be clearly posted at the site and the location of the test pits and wastewater systems components staked on the ground surface.

(3) If ground water is encountered in the test pit, the water table elevations that exist at the time of the site evaluation shall be submitted. Water table elevations shall be established from a benchmark or other fixed point of reference located on the property or within reasonable proximity to it. The existing property elevation at the site of each soil profile shall also be recorded relative to the benchmark or fixed point of reference.

g. *Management plan.* A management plan shall be submitted with each application. The plan shall address the inspection and maintenance procedures for all mechanical and electrical components of the wastewater system.

h. *Fees.* The application fee shall be paid prior to or at the time the application is accepted for review by the county.

i. *Supporting data and information.* Sufficient data and information to determine if the proposed wastewater system or modification of an existing wastewater system will meet the requirement of this division shall accompany all applications submitted for review.

j. *Signed copy of the maintenance contract for* secondary or tertiary systems. This contract shall be signed by all parties affected and shall be submitted to the county prior to issuance of a permit.

k. *Review of application.* The county shall review the application and submittals, and perform at least one site visit. The county shall respond to a community system or discharge plan application within 60 business days after receiving the completed application and associated fees. The county shall respond to wastewater applications for other systems within ten business days after receiving the completed application and associated fees.

l. *Approval.* If the county determines that the proposed design, installation, and management of the wastewater system, or the proposed modification of an existing wastewater system, conform to this division, a wastewater permit shall be issued to the owner and installer.

m. *Review comments.* If, upon review of the application and the supporting information, the county requires more information before a decision can be rendered, the county shall provide a list of questions or corrections. The applicant shall respond to these questions or corrections. Upon receipt of the applicant's response to these questions or corrections, the county shall continue the review of the application.

n. *Denial.* If, upon review of the application and the supporting information, it is determined that the proposed design, installation, modification, or management of the wastewater system does not conform to this division, then the wastewater permit shall be denied. The county shall provide, in writing, to the applicant the reasons for denial and the procedures for appeal. An applicant denied a wastewater permit by the county may, within 15 business days from the date of decision, appeal the decision as provided in Section 42-521 Appeals of this division.

o. *Evidence of a wastewater system permit.* When a wastewater system permit is approved, a copy of the permit shall be provided to the permittee. It is the responsibility of the permittee to post, or have posted, the appropriate portion of the permit in such a location and manner, on the site where the wastewater system is to be installed or modified, that the information on the permit is visible from the street. The permit shall remain posted until completion of the wastewater system installation or modification and the final inspection has occurred. The installer shall keep a set of approved plans and specifications on site during all phases of

wastewater system construction, until final inspection has occurred. The plans and specifications shall be made available to the county upon request. The address of the site shall be posted at the site and clearly visible from the street.

p. Revisions to permit.

(1) Installing a system that is different from the system permitted, or installing a permitted system under conditions that have changed, is prohibited, without first revising the permit.

(2) Making improvements to the property that result in a larger wastewater flow, covering the disposal system with impervious material, subdividing the property, adjusting a lot line, or modifying the proposed wastewater system are examples of the types of changes that require revision of the permit.

(3) In these instances, the owner or permittee shall submit to the county a request to revise the permit with the appropriate permit revision fee. (Note: A revision of a permit pursuant to this section may also require a modification of an approved discharge plan from State of New Mexico Environment Department, Liquid Waste Program and/or Ground Water Quality Bureau.)

q. *Revised plans and specifications*, as well as a revised site plan, may be required when the changes involve:

(1) Substituting a different treatment, holding, or disposal component for the component that was permitted; or

(2) Adding a treatment, holding, or disposal component; or

(3) Change of location or configuration of the system; or

(4) Prior to the changes being made in the field, the county shall approve all substantive changes to the approved plans and specifications. The permittee shall not commence revisions in the field until written or verbal approval is obtained from the county; or

(5) If installer of wastewater system changes.

r. Transfer of permit.

(1) Applications for permits are not transferable. Only the applicant may request that a permit be cancelled. Such requests must be made in writing.

(2) A wastewater system permit may be transferred to another installer if the following conditions are met:

a) The applicant provides written notice of the change to the installer and to Bernalillo County.

b) All information pertaining to the siting, design, location, installation conditions, or modification of a wastewater system remains the same.

c) The name, address, and phone number of the proposed installer is provided to the county and the county approves the installer.

d) A revision of permit fee is paid.

(3) An installer, who is identified on the permit approving construction, may upon written notice to both the applicant and to Bernalillo County withdraw from the permit. In such instances, the permit is suspended until the permit is amended by the applicant to identify another installer or until it reaches its expiration date.

(4) If the installer/contractor withdraws after commencing construction, the lot owner is responsible to eliminate any public safety hazards posed by open treatment systems, excavation, or other conditions related to unfinished construction and to amend/revise the permit as needed.

s. Permit Expiration.

(1) A wastewater permit for a new installation expires one year from the date of issuance. If a permit expires a new application must be made for a new wastewater system permit, and

(2) Once installed and approved, a wastewater permit expires

a) 30 days after the transfer of ownership of a property occurs (42-518 (a) of this division). The subsequent owner must submit for a wastewater operating permit within 30 calendar days of the property transfer and must provide a current system evaluation report in support of the applications, or

b) On the December 31 following 30 years from the known or suspected installation date of the system (See Section 519 of this division for recurring evaluation requirements after 30 years), or

c) Upon determination of failure of the system (See Sections 518 and 519 of this division)

t. Wastewater system abandonment and permit.

(1) Whenever the use of a wastewater treatment and disposal system is permanently discontinued for any reason, the septic, holding, or dosing tank shall be abandoned within 30 days of the discontinuance of use.

(2) The county shall be notified prior to abandonment, a permit for the abandonment is required, and the site shall be subject to an inspection by the county.

(3) Abandonment shall take place as described in the most current New Mexico Plumbing and Mechanical Code.

(4) However, if the county approves the use of a tank where the tank is to become an integral part of a sewer system, the tank need not be abandoned.

(159) (Ord. No. 2014-17, § 1, 10-28-14)

(160)

v) Sec. 42-502. - Wastewater Systems—Over 2,000 Gallons Per Day.

(161) In addition to the requirements in Section 42-501, Wastewater Systems, the following requirements shall be met for wastewater systems that receive or are designed to receive liquid waste as defined by the New Mexico Environment Department at a rate of over 2,000 gals/day.

a. Transfer of state issued permits. Previously issued state permits shall continue to be administered by the state through the term of the existing permit. Upon the expiration/requirement for renewal of the state permit, the system shall, as allowed by NMED, come under the jurisdiction of Bernalillo County and the applicant shall apply for a new permit with Bernalillo County. Any state-imposed operating and maintenance conditions shall remain as conditions of the permit issued by Bernalillo County.

b. Engineer. Designs for alternative wastewater systems to receive more than 2,000 gallons per day shall be submitted to the county under the seal of a professional engineer as defined by the New Mexico Environment Department, and such systems shall be installed in consultation with and a certificate of completion submitted to the county by a professional engineer as defined by the New Mexico Environment Department.

c. Operator. The operator shall have the appropriate wastewater operator's license as required by the State of New Mexico.

d. Performance. If less than two feet of suitable native soil is directly beneath the disposal field, disinfection is required.

(Ord. No. 2014-17, § 1, 10-28-14)

w) Sec. 42-503. - Cluster and Community Systems.

In addition to the applicable requirements in Sections 42-501 and 42-502 of this division, the following requirements shall be met:

a. *Design.* The systems shall be designed and constructed in accordance with the requirements of this division. For the purposes of using Chart 1, Maximum Total Flow, the lot size shall be the sum of the lot sizes of the lots using the wastewater system.

b. *Permits required.* Each lot owner, for that portion of the wastewater system for which they are responsible for having installed or maintained, shall obtain a wastewater system permit and an operating permit. The owner of the property on which the treatment or disposal component is located shall obtain a wastewater system permit and an operating permit for the remaining portion of the system.

c. *Maintenance and ownership agreement.* Each property owner on a cluster or community system shall prevent materials which would adversely affect the operation of the cluster or community system from entering the wastewater system. The applicant shall obtain all necessary rights-of-way, easements, or ownership of properties necessary for the operation of the cluster or community system. The owners issued the operating permit is responsible for the operation and maintenance of the cluster or community system, and remains responsible up until such time as the new owner obtains the operating permit for the system. The applicant shall submit to the county:

(1) A certified copy of an affidavit, which has been duly recorded in the office of the county clerk and added to the deed for the real property on which the system is located and the deed for the real property of each property served. The affidavit shall state that the property shall not be transferred to a new owner without the new owner being advised that the property is part of this system and that the new owner apply for and obtain an operating permit;

(2) Copy of a maintenance agreement to be reviewed and approved by the county. An approved maintenance agreement shall be in effect at all times for the wastewater system.

d. *Notice of application submittal.* Within 20 days of the county receiving a complete application for a community system, the county shall send written notice of the applications submittal to the owners of all property within 200 feet of the proposed location of the system. Written notice shall also be sent to lots which, as part of the subdivision approval, are required to utilize the community system.

(Ord. No. 2014-17, § 1, 10-28-14)

Sec. 42-504. Wastewater Operating Permits

For new or modified systems, the wastewater system permit (Sections 501, 502, or 503 of this division as applicable) shall also serve as the operating permit. In all other instances, the owner shall submit an operating permit application in a format prescribed by the county,

(a) Operation of a wastewater system shall not commence until the county has issued the operating permit to the owner of the property where the system is located.

(b) *Existing conventional system.* An operating permit for an existing conventional system, shall be issued if:

(c) The owner has agreed to have the septic tank pumped as specified in the management plan;

(d) The county has received a letter from the owner indicating that the occupant, if other than owner, has been informed on proper operation of the system;

(e) A system evaluator has declared the system to be "acceptable", completed the required county documentation, and the county has given the system evaluation approval.

(f) *Existing advanced system.* For existing advanced wastewater systems the owner shall have a valid maintenance contract in place at all times. The operating permit shall be issued if:

(1) The owner will continually have a maintenance service provider under contract, and the contract has been submitted to the county;

(2) The county has received a letter from the owner indicating that the owner has informed the occupant, if different than the owner, how to properly operate the system;

(3) A system evaluator has declared the system to be"acceptable", completed the required county documentation, and the county has given the system evaluation approval.

(g) *Permit Expiration.* Wastewater operating permits are not transferable and expire 30 days after the transfer of ownership of a property occurs or upon determination of system failure, (Section 43-518 (a) of this division)

(Ord. No. 2014-17, § 1, 10-28-14)

x) Sec. 42-505. – Holding Tanks, Portable Toilets, Composting/Incinerating Toilets, and Other Temporary and Alternative Systems

a. *Permits* issued under this section shall have the durations specified below starting from the earlier of the date of issuance of the permit or date of placement of the system. These applications and permits are not-transferable. A permit application renewal must be submitted prior to the expiration date to allow for continued use.

(1) These permits may be revoked if inspection/evaluation of these systems indicates deficiencies in containment or odor control, operation and maintenance of these tanks and systems is not in accordance with the required waste management plan, or if they become a nuisance based on repeated of frequent complaints or enforcements.

(2) Spills,overflows, and discharges from holding tanks, portable toilets, alternative toilets such as composting toilets, or other temporary wastewater systems (from whatever source and with or without permit or approval) have

the potential to be considered and enforceable as "illicit discharge" under the county's stormwater ordinance particularly if located near drainageways and/or storm drains.

b. *Applications* for the permits under this section shall include the following design and operational information:

(1) Source of water supplied to the site and estimated peak daily wastewater volume being generated.

(2) Specifications for the tank or system being installed or used. Systems will be designed to hold /address no less than three times the peak daily wastewater design flow.

(3) Site plan meeting the requirements of Section 501(b)(3) of this division. (The setback distances approved in Section 511, Table 7 of this division shall be maintained, unless addressed as a variance request to this section and requiring a separate variance application and associated fee.)

(4) Waste management plan indicating:

a) Anticipated frequency of disposal activity,

b) Estimated nature, form, and quantity of materials to be disposed for each disposal activity,

c) Methods which the waste materials will be disposed,

d) Location where the waste materials will be disposed, and

e) Person(s) responsible for ensuring the tank or system is properly maintenance.

f) As applicable, a copy of the intended pumping agreement/contract with a registered septage hauler.

g) Other information a requested by the County

(5) For consecutive annual renewals of the permits, as applicable, copies of the prior year's disposal manifests and a current maintenance contract for the upcoming year's use must be provided at the time of renewing the permit application. The site plan from the original application must be reviewed and updated if necessary to represent current site conditions.

c. *Revisions to permit.* Installing a system that is different from the system permitted, or installing a permitted system under conditions that have changed, is prohibited, without first revising the permit. In these instances, the owner or permittee shall submit to the county a request to revise the permit with the appropriate permit revision fee.

(1) Prior to the changes being made in the field, the county shall approve all substantive changes to the approved plans and specifications. The permittee shall not commence revisions in the field until written or verbal approval is obtained from the county.

(2) Revised plans and specifications, as well as a revised site plan, may be required when the changes involve:

a) Substituting a different treatment, holding, or disposal component for the component that was permitted.

b) Adding a treatment, holding, or disposal component.

c) Change of location or configuration of the system.

d) Change in the site plan or waste management plan.

d. Holding tanks

(1) Wastewater Holding Tanks shall be permitted under this division prior to installation and use and the permit will expire 365 calendar days from date of issuance of the permit.

(2) Holding tanks shall not be used in lieu of connection to sewer or construction of an on-site wastewater treatment system for new construction of structures nor as a permanent remedy or replacement for a failed on-site wastewater system.

(3) Previous holding tank installations are not grandfathered from permitting, but if meeting permit requirements, may be allowed to continue under permit for existing uses and for new construction if the construction is limited to remodel, repair, or addition of floor space that does not create additional wastewater flows by addition of plumbing fixtures. Their use shall be discontinued once a sewer or wastewater system becomes available for use by the structure, a greater than 50% replacement of the structure occurs, and shall be removed at the time of building demolition.

(4) If electrical power is available to the site, the holding tank shall be equipped with a working audible and visual-high level alarm. The alarm shall be set to activate at 80 percent of tank capacity, or sooner.

(5) Holding tanks shall be constructed of the same materials and by the same procedures required of septic tanks, except they shall have no discharge outlet and may be one-chambered.

(6) The minimum size of a holding tank shall be 1,000 gallons, or three times the peak daily design flow, whichever is greater.

(7) Holding tanks shall be located in an area readily accessible to a pump vehicle under all weather conditions, and where accidental spillage during pumpage will not create a nuisance or a hazard to public health or enter drainages or a stormwater system.

(8) Holding tanks shall be pumped, cleaned and inspected for damage and leakage on no less than a quarterly basis and in accordance with the established waste management plan.

(9) Holding tank permits may be appropriate where:

a) There is a temporary need such as when it a sewer system may be available within six months of a sewer or other wastewater treatment system becoming available.

b) Where a structure on the property is intended for minimal and infrequent/seasonal recreational use and in the judgement of the County, the nature of use does not warrant and/or would be detrimental to proper operation and maintenance of a conventional or advanced wastewater system.

c) Where there are no permanent utilities installed for a property parcel or adjacent parcels and no permanent source of water is supplied to structure.

d) Where use of wastewater holding tanks is normative, such as forest service campgrounds, open space facilities, or remote camping areas.

e) Where in the judgement of County staff there are other well documented extenuating circumstance where it is in the best interest of public health and sanitation and the environment to provide for use of a holding tank and where use of a holding tank would not promote a use or purpose contrary to other County codes and ordinances.

e. Portable Toilets

(1) Portable toilet use incidental to other county-issued permit - If another County permit is issued (other than under this division and other than as special use permit), and

a) the permit is issued for a specified term not exceeding one-year, and

b) the use of a portable toilet is required, typical, or incidental for utilization of the permit (eg. portable toilets at construction sites, for special events, or for a series of recreational events), then

c) the County will have been deemed to have provided "approval" for purposes of this division without further review or issuance of a variance permit or holding tank permit.

(2) *Temporary use of a portable toilet for less than 30 total days* - Any use shall be considered to have conditional County approval without review and without further written approval. This approval presumes that the toilets are

maintained in good order, no spills occur, and that waste is properly disposed. The conditional approval will be revoked upon substantiation of a complaint regarding portable toilet use, and a county variance permit or a holding tank permit, depending on severity, will be required under this division to allow for continued use of the portable toilet(s). The conditional approval expires 30 days after initial placement of the toilet.

(3) *Temporary use of a portable toilet for more than 30 total days and not exceeding 120 total days* - Any use will, at a minimum, require an variance permit under this division. The variance presumes that the toilets are maintained in good order, no spills occur, and that waste is properly disposed. If the variance permit is revoked, then a County holding tank permit must be obtained under this division to allow for continued use of the portable toilet(s) and a holding tank permit fee will be assessed. The conditional approval expires the earlier of 30 days after initial placement of the toilet or issuance of the variance permit.

(4) *Use of portable toilets exceeding 120 total days* – and for recurring use exceeding 120 total days on an seasonal or annual basis and if not addressed by other County permit. Such use requires issuance of a holding tank permit under this section. This permit expires at the end of the 120-day period starting with earlier of the variance permit date or the day of initial placement.

a) In addition to the items described in Section 505(b) of this division, the applicant will provide a description (drawing, picture, or written) of a positive lock-down mechanism for securing the toilets from vandalism and tipping, a designated plan for final seasonal cleaning or year round maintenance, and a designated place for secure storage or for securing the toilets in place (i.e. locked) during non-use periods.

b) Other conditions as outlined in this section also apply including retention of disposal manifests for the preceding annual period of placement until such time as a wastewater system, holding tank, or sewer is provided to replace use of the portable toilets.

c) The holding tank permit presumes that the toilets are maintained in good order, no spills occur, and that waste is properly disposed.

1) If those conditions are not met or maintained, the holding tank permit will be revoked upon substantiation of a complaint regarding the portable toilet maintenance and condition.

2) If a holding tank permit is revoked due to maintenance or conditions, the applicant may not apply for any other portable toilet or holding tank or related variance permit for a period of one year from the expiration date of the original permit or variance expiration date.

f. Composting /incinerating toilets

(1) Composting/incinerating toilets shall not be used as remedy or replacement for a failed on-site wastewater system or as a method to avoid replacement of conventional wastewater system or for an advanced wastewater treatment on a lot less than ¾ acre in size.

(2) Only composting/incinerating toilet systems certified by the National Sanitation Foundation will be permitted for installation. Self-constructed systems are prohibited and will not be considered for permit.

(3) Composting/incinerating toilets will be permitted as holding tanks under this division prior to installation. All provisions of Section 505 (a),(b), and (c) are deemed applicable for composting/incinerating toilet permits. The permit will expire 365 calendar days from the date of issuance.

(4) Applicants will comply with manufactures specifications/recommendations for installations, and with all applicable plumbing, electrical, and building codes for installation and permits

(5) In addition to the site plan requirements under Section 505(b)(3) of this division, the applicant shall demonstrate that :

a) the site has adequate space on the subject parcel for installation, at a future date, of a conventional or advanced wastewater treatment system as appropriate for site conditions.

b) The location for such as system will be marked on the site plan as a "wastewater system reserved space" and no buildings or structures will be placed or constructed in the reserve space.

c) The site plan shall clearly state that the structures served by the composting/incinerating toilet shown on the site plan cannot be modified or changed such that there would be an increase in anticipated wastewater flows for the parcel and no additional structures for human habitation may be added,

d) Any such modification above will require a building permit application be submitted and the applicant will be required to install a conventional or advanced wastewater treatment system at the time of modification or construction as normally required by ordinance.

(6) In addition to the listed waste management plan requirements of Section 505(b)(4) of this division, the applicant shall also specifically address:

a) the method and location of disposal method for solids/compost from the toilet

b) that solids/compost will not be used in garden areas producing food for human consumption.

c) that the solids/compost disposal area maintain the set-backs described in Table 7 as relates to drainfield set backs and that the stormwater and irrigation runoff from the disposal area be contained on the parcel.

d) The manner, method, and location for disposal of urine and liquid wastes from the toilet. The county may require that a separate holding tank be provided for containment and addressed as part of the initiating holding tank permit.

e) Other elements or requirements as determined by the County on a case-by-case basis that are consistent with protection of human health and the environment.

(7) Composting/incinerating toilets may be used in combination with other alternative systems such as graywater systems, laundry-to-landscape diversions, or other designed systems to maximize graywater capture and reuse as allowed under other provisions of this division. A variance permit may be required for combined uses.

(8) Composting/incinerating toilets may be appropriate for situations :

a) As described in Section 505 (d)(9) (b through e)

b) In association with parcels and applicants utilizing a "tiny home" concept, but with adequate lot size to preserve set backs and to address neighboring property concerns regarding compost disposal and that allow for future conventional or advanced wastewater treatment options.

c) For parcels greater than two acres in size, regardless of the home concept proposed.

d) For parcels in remote areas / agricultural areas without extensive existing residential or commercial areas

g. *Other temporary / alternative systems*. The county's determination of suitability for other temporary systems shall be determined on a case-by-case basis and will be addressed by a written variance to this section of the ordinance or by issuance of a holding tank permit.

(Ord. No. 2014-17, § 1, 10-28-14)

y) Sec. 42-506. - Fees.

a. No permit or approval shall be issued until all required fees have been paid.

b. A schedule of fees shall be established by the county commission.

c. Fees are nonrefundable.

z) Sec. 42-507. - Performance standards.

a. The final effluent quality from the wastewater treatment component shall continually comply with the requirements of this division. The performance standards for effluent as provided in Table 1 shall be met at the end of the treatment component.

b. Total flow shall not exceed flow per lot size as shown on Chart 1, Maximum Total Flow. No new, conventional treatment system shall be installed on a lot sized smaller than three-fourths-acre.

c. The required level of treatment shall be based on the most restrictive combination of siting conditions.

(162) **Table 1. Performance Standards for Effluent**

Primary	Secondary	Tertiary	Disinfection [E]
Settleable Solids ≤ 0.5ml/l	Settleable Solids ≤ 0.5ml/l	Settleable Solids ≤ 0.5ml/l	Fecal Coliform ≤ 126 CFUs/100ml
BOD ≤ 150 mg/l	BOD [A] ≤ 30 mg/l	BOD [A] ≤ 30 mg/l	
TSS ≤ 60 mg/l	TSS [B] ≤ 30 mg/l	TSS [B] ≤ 30 mg/l	
Fecal ≤ 10^6 MPN/100ml	Fecal ≤ 10^4 MPN/100ml	Fecal ≤ 10^3 MPN/100ml	
TN [c]	TN [c]	TN [D]	

(163) [A] Five-day BOD not to exceed a 6-sample rolling average of 30 mg/l with no single sample to exceed 60 mg/l.

(164) [B] A (six) 6-sample rolling average of 30 mg/l with no single sample to exceed 60 mg/l.

(165) [C] See Chart 1 for effluent performance standards for Total Nitrogen (TN).

(166) [D] Based on a six-sample rolling average with no single sample exceeding twice the concentration limit from Chart 1. Total Nitrogen (mg/L) = [Lot size (acres)/Design Flow (gpd0] x 30,000.

(167) [E] When disinfection is required; the effluent shall be subject to a minimum of secondary treatment prior to disinfection.

(168) General: Direct effluent sampling and analysis is required for systems that do not conform to the manufacturer's guidelines for field parameters, where the manufacturer has not established guidelines for field parameters, or for systems that have been determined by Bernalillo County to not be functioning properly.

(169)

(170)

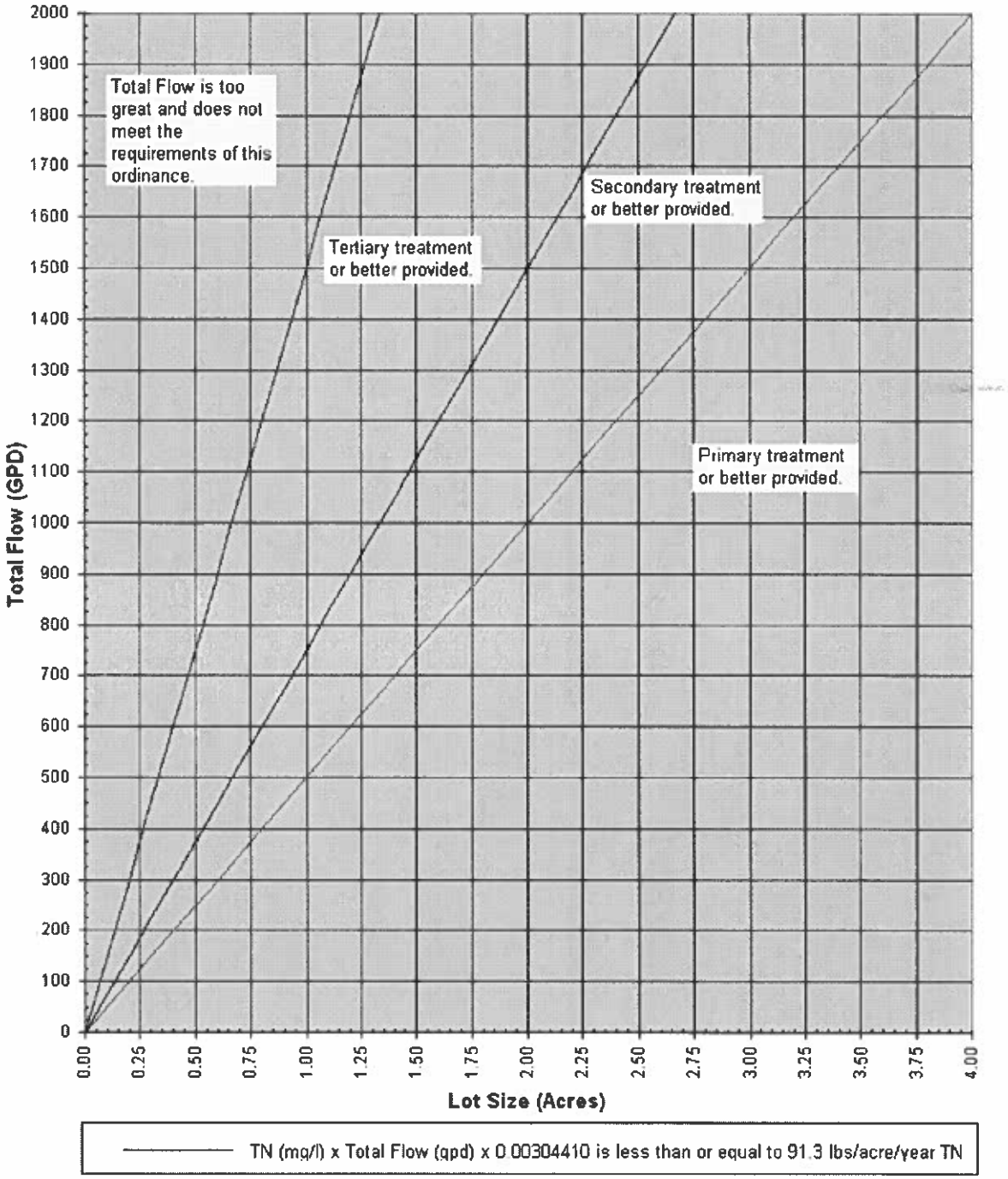
(171)

(172)

(173) (Intentionally Blank)

(1)

Chart 1. Maximum Total Flow



(174)

(Ord. No. 2014-17, § 1, 10-28-14)

aa) Sec. 42-508. - Design.

(a) General design.

(1) *Pretreatment.* Substances deleterious to a wastewater system shall be intercepted, diluted, or treated prior to the substance discharging into a wastewater system. Toxic, hazardous, or industrial wastewater shall not be introduced into a plumbing drain system that is served by a wastewater system.

(2) *Design basis.* All wastewater systems shall be designed to hold wastewater and/or reduce the contaminant load and disperse the hydraulic flow of wastewater as specified in this division. Additional water resulting from the use of a reverse osmosis water treatment unit shall not enter the wastewater system unless the wastewater system is designed to handle the additional hydraulic flow.

(3) *Venting.* A means for providing a free flow of air movement shall be provided throughout all gravity flow portions of a wastewater system. All holding components shall be vented.

(4) *Frost protection.* All wastewater system components shall be designed to be protected from freezing temperatures that could detrimentally affect component operation. All buried components of the system other than drain lines shall have a minimum of 18-inch soil cover.

(5) *Soil erosion control.* All wastewater system designs shall incorporate protection of the system from soil erosion that could detrimentally affect treatment or disposal.

(6) Alarms or warning systems.

a) A wastewater system treatment component utilizing a mechanical or electrical device shall be provided with an automatic visual and audible means of notifying the operator of the wastewater system of a device failure in accordance with this section.

b) A wastewater system holding component shall be provided with an automatic visual and audible means of notifying the operator of the wastewater system of the necessity for pumping.

c) An alarm indicating the necessity to pump a wastewater system holding component shall be set so as to allow at least six hours holding capacity above the high water alarm.

d) An alarm indicating the failure of a pump shall remain audible and visible until manually turned off. All alarms shall be on a separate circuit from pumps and shall be contained in weather-proof control boxes or located inside a building or other weather-proof structure.

(7) *Control panels*. Electrical components shall be UL listed, waterproof, and if placed outside or in an unheated area, specified by the manufacturer for outdoor use. All controls shall be on a separate circuit from pumps.

(8) *Water tight*. Joints and openings of tanks, pump stations, and pump chambers shall be sealed using a bonding compound that will adhere to the construction materials of the tank and inlet and outlet devices.

(9) *Accessibility*. The design of a wastewater system shall provide for access to all components that require maintenance or observation without entry into the tank. An easily accessible sampling port located at the end of the treatment component where performance standards are to be met shall also be provided.

(10) *Pumps and equipment.* All pumps and equipment shall be designed to pump septage, septic effluent, or treated wastewater as appropriate, to prevent freezing, and prevent siphoning of the dispersal area back to the tank, and shall be sized to serve their intended purpose. Pumps and equipment shall be on separate circuits from associated alarms and control panels.

(11) *Observation port.* Each soil disposal component shall include an observation port of four-inch minimum diameter located at the end of each trench. An observation port should be a four inches PVC pipe installed vertically from the bottom of the trench to 12 inches above final surface grade. The portion of pipe in aggregate (gravel) shall be perforated. The observation port can be connected to the drainline with a PVC tee or installed adjacent to the drainline, at the end of the trench. The observation port shall be capped.

(12) Waste interceptors.

a) The practice of installing floor drain systems in garages, storage areas, or process areas that may result in discharge of untreated wastewater and/or other potentially hazardous substances onto or into the ground through "french drain" or similar type systems is prohibited.

b) When wastewaters are discharged containing excessive amounts of grease, garbage, flammable wastes, sand or other ingredients that may affect the operation of an onsite wastewater system, an interceptor(s) for such wastes shall be installed in-line prior to the wastewater treatment unit.

c) Installation of such interceptors shall comply with the most current Uniform Plumbing Code.

d) Waste interceptors shall be maintained in accordance with manufacturer's specifications.

e) Grease interceptors. Grease interceptors are generally not required as part of a wastewater system that serves a residence. Grease interceptors are required where grease waste is produced in quantities that could cause line stoppage or hinder wastewater disposal. The design, construction, and

installation of grease interceptors shall be based on standards found in the most current Uniform Plumbing Code.

f) Separate waste interceptors and grease traps shall be installed for commercial operations requiring a grease interceptor. Floor drains, mop sinks, and drains from other low grease areas shall be routed through the waste interceptor and shall not be routed through the grease interceptor.

g) Other waste interceptors/separators may be required depending on the nature of the commercial operation.

h) Discharge from such interceptor devices must be to a private or public sewer system or other method approved by the county, and cannot be directly discharged to the ground surface or to the subsurface unless otherwise addressed and permitted, such as through a graywater or water reuse system, or through a variance request.

(13) *Anchoring system components.* All wastewater system components subject to flotation in saturated conditions shall be installed so as to prevent flotation. Anchoring shall be done as specified by the manufacture.

(14) *Water softener wastewater.* Waste from a water softener unit shall comply with the following:

a) Softener waste may be discharged to a conventional treatment unit.

b) For new construction utilizing an advanced treatment unit, the softener waste shall not be discharged to the advanced treatment unit. The softener waste shall bypass the advanced treatment unit and discharge directly to the drainfield or be disposed of in some manner acceptable to the county.

(b) Design flow. For purposes of design, flow into a wastewater system shall be estimated using Table 2, "Estimated Wastewater Flows," and the following requirements:

(175) Table 2. Estimated Wastewater Flows

TYPE OF OCCUPANCY	GALLONS PER DAY
1. Airport, bus terminal, train station	20 per employee 5 per passenger
2. Beauty and barber shop	75 per service chair
3. Bowling alleys (snack bar only)	75 per lane
4. Bed and breakfast	150 first bedroom 100 each additional bedroom
5. Camps: campground with central comfort station with flush toilets, no showers	 35 per person 25 per person

day camps (no meals served) summer and seasonal	15 per person 50 per person
6. Churches (sanctuary) with kitchen waste	2 per seat 7 per seat
7. Dance hall	5 per person
8. Doctor and dentist office	250 per practitioner, 15 per employee
9. Factories, per 8-hour shift: no showers with showers with cafeteria, add	 25 per employee 35 per employee 5 per employee
10. Food operations: Restaurants operating 16 hours or less per day Restaurants operating more than 16 hours per day Bar, cocktail lounge add per pool table or video game Carry out only, including caterers add per 8-hour shift Food outlets only add for deli add for bakery add for meat department add per public restroom	 40 per seat 60 per seat 20 per seat 15 each 50 per 100 sq. ft. floor space 20 per employee 10 per 100 sq. ft. floor space 40 per 100 sq. ft. floor space 40 per 100 sq. ft. floor space 75 per 100 sq. ft. floor space 200
11. Hotels, motels, lodges: laundries, lounges and restaurants calculated separately	60 per bed

1

12. Institutions (resident): Nursing homes Rest homes	75 per person 125 per person 125 per person
13. Laundries: self-service (minimum 10 hours/day) commercial	 50 per wash cycle per manufacturer's specifications
14. Offices	20 per employee per 8-hour shift
15. Parks: picnic park — toilets only	20 per parking space
16. Recreation vehicles (RV) park: without water hookup with water and sewer hookup RV dump stations	 75 per space 100 per space 50 per RV

17. Schools — staff and office Elementary and day care Intermediate and high Boarding, total waste gym and showers, add with cafeteria, add	20 per person 15 per student 20 per student 100 per person 5 per student 3 per student
18. Service stations and convenience stores uni-sex restrooms	400 per toilet 800 per toilet
19. Stores public restrooms	20 per employee 10 per 100 sq. ft. floor
20. Swimming and bathing places, including spas and hot tubs, public	10 per person
21. Theaters, auditoriums Drive-ins	5 per seat 10 per space
22. Veterinary clinic add add	250 per practitioner 15 per employee 20 per kennel, stall, or cage

(176)

(1) For residences, the volume of wastewater shall be calculated as 40 percent blackwater and 60 percent graywater.

(2) Estimated flows for dwelling units assume a maximum occupancy of two persons per bedroom for the first two bedrooms and one person for a third bedroom, based on 75 gallons per person per day. For a fourth bedroom, an additional 65 gallons per person per day will be estimated; for a fifth bedroom; an additional 60 gallons per person per day will be estimated; and for each additional bedroom thereafter, an additional 50 gallons per person per day will be estimated.

(3) Estimated flows for residential care facilities assume a maximum occupancy of two persons per bedroom (75 gallons per person per day). Where residential care facilities will house more than two persons in any bedroom, estimated flows shall be increased by 50 gallons per each additional occupant.

(4) Estimating occupant load. When the number of persons using a facility is needed to determine the wastewater design flow, that number shall be the actual number of persons, or the occupant load as calculated per the most current Uniform Building Code, whichever is greater.

(5) Estimating contaminant loads. Estimates of contaminant loads shall be based on a detailed analysis performed by the designer of the system and shall include, but not be limited to: BOD, Total Nitrogen, and Total Suspended Solids.

(6) Total flow. For the purposes of using Chart 1, total flow means the sum of the design flows for all wastewater systems on a lot.

(7) Flow velocity.

a) Gravity flow piping between wastewater system components shall be installed at a pitch that produces a computed flow velocity of at least one-foot per second when flowing half full.

b) Pressurization equipment or devices and piping upstream of a wastewater system treatment or disposal component shall be installed to manufacturer's recommendations.

c) Gravity piping within a wastewater disposal component shall be installed level.

(8) *Other accepted design flow references* (such as the Uniform Plumbing Code or the U.S. Environmental Protection Agency (USEPA) design manual: on-site wastewater treatment and disposal systems); design flows for nonresidential sources also may be based on professional engineering design calculations; total design flows may be determined by the submittal of metered water use or effluent flow data and shall be multiplied by a safety factor or [of] 1.5 for design flow calculations.

(c) Septic tanks.

(1) The design and construction of septic tanks shall comply with the design and construction standards set forth in the wastewater ordinances adopted by the New Mexico Environmental Improvement Board or incorporated in those ordinances by reference.

(2) Minimum effective septic tank capacity shall be determined from Table 3, Septic Tank Capacity. All septic tanks shall be multiple chambered or shall be placed in series to achieve the required effective capacity.

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Table 3. Septic Tank Capacity

DESIGN WASTEWATER FLOW Gallons/Day	MINIMUM LIQUID CAPACITY* Gallons
0—375	1,000
376—450	1,200
451—600	1,500
601—1,250	2,000
1,251—1,750	2,500
1,751—2,500	3,000

*bb) *Note: Minimum Liquid Capacity for flows in excess of 2,500 gal/day shall be based on the following equation: (Gallons per day (gal/day) x 0.75) + 1,125.*

(3) An approved outlet filter device shall be installed in the tank or before final discharge to the drainfield outside of the tank.

a) Upon modification of any part of the system, an approved outlet filter device shall be installed

b) Outlet filters will be in accordance with New Mexico state regulations including installation to grade and including an access handle extending to within six inches of the surface.

c) Outlet filters shall be placed to allow accessibility for routine maintenance. Utilization and sizing of outlet filters shall be in accordance with the manufacturer's recommendations.

d) For tanks placed in series, the outlet device shall be placed in the last tank.

(4) All tanks, pump stations, or pump chambers shall be watertight. These shall be constructed of concrete, plastic, fiberglass or other approved material and shall be appropriately coated to resist corrosion (excepting Type V concrete).

(5) Access manholes/risers shall be installed over each tank chamber and shall extend to finished grade with secure lids.

a) Upon modification of any part of the system, an approved access manhole/riser shall be installed.

b) Access risers shall be installed in accordance with New Mexico Environment Department requirements. This will include a lockable removable cover on an access port or covers with a weight of at least 58 pounds may be used in place of a lockable cover. Access ports shall be at

least 24-inches minimum diameter to a depth of three feet and 30-inches minimum diameter for depths over three feet.

c) All valves, motors, pumps, aerators, and other mechanical or electrical devices shall be located where they will be accessible for inspection and repair without requiring entry into the tank.

d) If the wastewater flow to an existing system increases by no more than 75 gallons per day above the design flow for which the system was initially approved, the minimum effective capacity of the septic tank need not be increased. However, performance standards from Chart 1, "Maximum Total Flow" shall apply.

(d) Dosing tanks/pump tanks/grinder-lift pump tanks. The following requirements shall apply to all tanks used as part of a wastewater treatment and disposal system, unless specifically exempted by other provisions of this division.

(1) Tanks shall have a minimum effective capacity of one day's design flow, grinder-lift pump tanks shall have a minimum ½ day's design flow capacity.

(2) Design and construction standards for tanks shall be the same as for septic tanks, except that a single compartment tank is allowed and manhole covers shall be brought to grade.

(3) Where the dosing tank is following primary treatment, handling clear effluent, and provides a lift to a low dose pressure or gravity feet system, a smaller capacity tank may be allowed.

(Ord. No. 2014-17, § 1, 10-28-14)

cc) Sec. 42-509. - Graywater Systems.

(a) All information required for the issuance of a wastewater permit shall be required for a graywater system used to treat greater than 250 gallons per day of graywater including but not limited to submission of system designs. Such systems shall be permitted separately from the companion wastewater system. Graywater systems shall require a maintenance contract as described in Sections 499(d) and be maintained as described in Sections 415 and 416, inclusive of provisions specified for advanced wastewater systems. The use of graywater systems discharging less than 250 gallons per day may be allowed under a variance permit to the underlying wastewater permit as described in Section 520 of this division and do not require separate permitting.

(b) The use of a graywater system does not change the design, capacity or absorption area requirements for the on-site wastewater system at the residential unit, and the on-site wastewater system is designed and sized to handle the combined blackwater and graywater flow if the graywater system fails or is not fully used.

(c) Design flows for graywater systems shall be calculated by the following:

(1) Twenty percent of the total design flow for the segregation of laundry waste; and

(2) Thirty-three percent of the total design flow for the segregation of the bathroom (showers, tubs and wash basin) waste.

(d) Clearance requirements for graywater systems shall be four feet of suitable soil. Discharge into the soil where the vertical clearance from the bottom of the absorption area to seasonal high ground water table, impervious formation, or other limiting layer is less than four feet is not allowed. A reduction in this clearance may be allowed with appropriate advanced treatment or alternative disposal.

(e) Setback requirements for graywater systems shall meet the requirements of Table 7 except for the following:

(1) Property lines, two feet for disposal area;

(2) Building or structure, two feet for disposal area; and

(3) Building or structure, zero feet for above ground tanks.

(f) A treatment unit /surge tank shall be required for all graywater systems. If a tank is utilized as the treatment unit:

(1) The tank may be a single compartment;

(2) The tank shall be sized to accommodate one day design flow; and

(3) Access to the tank shall be provided by a secure lid installed at or above grade.

(4) Tanks shall be constructed of solid durable materials, not subject to corrosion or decay and shall be watertight and shall have be approved by NMED. Metal tanks shall not be authorized.

(5) Above ground tanks shall be set on a three-inch minimum concrete pad. Above ground tanks shall be anchored to prevent against overturning..

(6) Underground tanks shall be structurally designed to withstand anticipated earth and other loads and covers shall be capable fo supporting an earth load of not less than 300 pounds per square foot. Underground tanks shall be ballasted, anchored, or otherwise secured to preventing floating and to meet or exceed the buoyancy forces on the tank. Underground tanks shall be installed on dry, level, well-compacted soil.

(7) All tanks shall have an overflow drain with a permanent connection to the building drain or building sewer. The tank shall be protected against sewer line backflow by a backwater valve.

(8) Each tank shall be vented as required by the Uniform Plumbing Code.

(9) Each tank shall have its rated liquid capacity permanently marked on the unit. In addition, a sign "GRAYWATER SYSTEM, DANGER — UNSAFE WATER" shall be permanently marked on the tank.

(g) The graywater system shall have no direct or indirect cross connections with potable water systems, and shall be protected by a backflow preventer and/or air gap as appropriate and in conformance with the uniform plumbing code.

(h) Graywater use for purposes other than irrigation or toilet flushing is prohibited. Irrigation of edible food crops is prohibited.

(i) Graywater disposal systems shall be based on the design requirements and soil types and characteristics as described in Section 42-510.

(Ord. No. 2014-17, § 1, 10-28-14)

dd) Sec. 42-510. - Disposal Systems.

(a) All systems shall be located and installed so that with proper maintenance the systems function in a sanitary manner, do not create sanitary nuisances or health hazards, and do not endanger the safety of any domestic water supply, ground water, surface waters or degrade stormwater quality. Wastewater from treatment and disposal systems shall not be discharged onto the ground surface, or directly or indirectly discharged into a stormwater system, arroyos, ditches, drainage structures, ground water, or surface waters unless with an approved discharge plan from the State of New Mexico Environment Department, Ground Water Quality Bureau or other state or federal permit. To prevent such discharge or health hazards:

(1) Systems shall not be located under buildings, including pilings for elevated structures, or within 15 feet of swimming pool walls, or within five feet of property lines.

(2) Systems shall not be located on slopes that exceed 15 degrees as measured from the horizontal.

(b) Suitable, unobstructed land shall be available for the disposal system and its replacement or expansion. All disposal systems that utilize subsurface discharge and soil absorption shall be designed with an unobstructed replacement area so that additional subsurface absorption areas equivalent to at least 100 percent of the required original disposal system may be installed if the original system cannot dispose of all the wastewater. The disposal system / replacement area for a

wastewater system may also service as the replacement disposal system for a proposed graywater system.

(c) The minimum required absorption surface area in a disposal system in square feet shall be based on the wastewater design flow rate and application rate as determined from Table 4 for the respective soil types.

(1) The required absorption surface area shall be calculated by the following formula: ABSORPTION AREA = Q x AR, Q = the design flow rate in gallons per day; AR = application rate (from Table 4).

(2) The soil conditions at the infiltrative surface of the wastewater system disposal component utilizing native soils shall be used to establish the maximum loading rate for a wastewater system disposal design. The gravel content of in-place natural soil used for disposal shall not exceed 30 percent.

(3) The application rate will be based on the most restrictive soil classification located below and within four feet of the bottom of the absorption area.

(4) No conventional on-site wastewater system shall discharge wastewater into the soil where the vertical clearance from the bottom of the absorption area to seasonal high ground water table, impervious formation or other limiting layer is less than four feet of suitable soil. A reduction in this clearance may be allowed with appropriate advanced treatment or alternative disposal. Conventional treatment systems shall not be constructed in type Ia soils where the depth to ground water is less than 30 feet, in type IV soils, or in gravel.

(d) Designs shall take into account restrictive horizons or ground water levels that may affect treatment or disposal. Documentation based on soil permeability and evapotranspiration estimates correlated to specific soil characteristics and described in a detailed soil characteristic analysis shall be submitted.

(1) The soil classification shall be determined by two test holes/pits located at opposite ends of the proposed disposal system area. The county may waive the test pit requirement in the North Albuquerque Acres areas, West Mesa areas, and other areas as deemed appropriate by the county.

(2) A detailed soil profile, in accordance with U.S. Department of Agriculture (USDA) soil classification methodology, shall be submitted with the wastewater application for each hole, indicating soil horizons, horizon thickness as a function of depth, and soil texture.

(3) For soil evaluation the American Society for Testing and Materials (ASTM) standard D5879-95 "Standard Practice for Surface Site Characterization for On-Site Septic Systems" and/or ASTE standard D5921-96 "Standard Practice for Subsurface Site Characterization of Test Pits for On-Site Septic Systems" may be required by the County.

(3)

(177) Table 4. Maximum Soil Infiltration Rates

Soil Type	Soil Texture	Application Rate for Wastewater (AR) (sq. ft./gal/day)
Ia [1]	Coarse Sand	1.25
Ib	Medium Sand, Loamy Sand	2.00
II	Sandy Loam, Fine Sand, Loam	2.00
III	Silt, Silt Loam, Clay Loam, lty Clay Loam, Sandy Clay Loam	2.00
IV [2]	Sandy Clay, Silty Clay, Clay	5.00

(178) [1] Secondary treatment and disinfection required.

(179) [2] Secondary treatment with low pressure dosed disposal system required.

(4) The following treatment levels/options are required based on the depth of suitable soil:

a) Greater than or equal to four feet of suitable soil — primary treatment;

b) From two to four feet of suitable soil — secondary treatment and disinfection; and

c) Less than or equal to two feet of suitable soil — tertiary treatment and disinfection.

d) A mound system may be used to meet clearance requirements or to overcome soil type limitations in lieu of advanced treatment.

e) Effluent distribution to type IV soils shall be accomplished by means of timed low pressure dosed distribution.

(e) Distribution box (or devices, D-boxes) which are used for distributing wastewater to the disposal lines shall be installed as described below:

(1) Distribution boxes shall be watertight, constructed of durable materials, have adequate structural strength, and be of sufficient size to accommodate the required number of drainlines.

(2) The invert of inlets to the box shall be at least one inch above the invert of the outlets. The invert of all outlets shall be level with respect to each other.

(3) Set on a concrete foundation or compacted soil.

(4) The distribution box shall be easily accessible, brought up to grade or its location permanently marked.

(5) A method of adjusting the flow through the distribution box shall be available.

(6) Concrete D-boxes shall be coated on the inside with bituminous coating or other approved method acceptable to the county.

(f) Header pipe. Header pipe, when used, shall be installed in compliance with the following requirements:

(1) Header pipe shall have a minimum inside diameter of four inches for gravity flow applications. Header pipe shall not be perforated.

(2) The header pipe shall be laid level with direct, watertight connections to each disposal line and the septic tank outlet pipe. When a disposal system is utilized which does not require the use of mineral aggregate or the header pipe is not included within the absorption surface area, the header pipe shall not be included in disposal area size calculations. The header pipe shall be designed to distribute effluent as equally as practical to each drainline and shall be supported so that the header is level. When installed in a disposal bed which uses mineral aggregate, the header pipe shall be encased in mineral aggregate, and shall be included as part of the disposal area.

(3) Pipe that connects the septic tank outlet to the header pipe or a distribution box shall comply with the strength and material standards for header pipe as required by the county.

(4) Leveling of pipes, distribution, or any other portions of a wastewater system shall be accomplished with the use of the proper leveling equipment.

(g) Dosing. Pumps used to distribute wastewater effluent shall be certified by the manufacturer to be suitable for dosing. Dosing siphons may be used in lieu of pumps.

(1) Dosing systems with 2,000 square feet of disposal area or less shall consist of a dosing tank that receives the flow from a septic tank or other treatment unit.

(2) This dosing tank shall be provided with one or more pumps with level controls set in accordance with the requirements set forth in subsections (e)(4) and (e)(5) of this section.

(3) Two pumps shall be required for systems treating more than 500 gallons per day of commercial wastewater and the system shall be provided with a redundant pumping system.

(4) Where dosing is required for systems treating 500 gallons or less per day of commercial wastewater, only one pump shall be required.

(5) Dosing systems with design flows greater than 500 gallons per day or with disposal areas greater than 2,000 square feet shall have a maintenance agreement in place for the dosing system.

(6) Dosing systems that have more than 2,000 square feet of disposal area shall have two dosing pumps, with each pump serving one-half of the total required absorption area. The pumps shall dose alternately. Dosing pumps shall be provided with effluent level controls set in accordance with the requirements set forth in subsections (e)(4) and (e)(5) of this section.

(7) The volume of the dose shall be adequate to assure that the entire drainline is dosed during each cycle.

(8) The rate of dosing shall not exceed the ability of the soil to accept the effluent.

(9) Where a septic tank or other wastewater receptacle must be placed too low to permit gravity flow into a properly designed, constructed, and located disposal system, a pump may be used to lift the effluent to a properly constructed header pipe or distribution box for effluent distribution by gravity throughout the drainfield area.

(10) An audio and visual high-water alarm shall be in a location visible and audible to system users. If the alarm is located outside, the alarm shall be waterproof and specified by the manufacturer for outside use.

(11) Effluent distribution to native soils shall be such that no dose exceeds 20 percent of the total daily wastewater flow estimate.

(h) Trenches shall conform to the following (see Table 5).

(1) The trench width shall be no less than one foot and no more than three feet.

(2) A minimum of six inches of aggregate shall be placed below the invert of the drainline to provide surge storage. This area of trench sidewall shall be used in calculating the absorption area, up to a maximum of seven feet absorption credit.

(3) Up to an additional three feet of aggregate may be placed below the distribution pipe.

(4) The total absorption area shall be calculated utilizing the total trench bottom and sidewall areas described in Paragraph (13) of this subsection.

(5) The total absorption area shall not exceed seven square feet per linear foot of trench.

(6) A minimum of 300 square feet of bottom area shall be provided for each system exclusive of any hard pan, caliche, rock, clay or other impervious formations.

(180) Table 5. Trench Construction Requirements

	MINIMUM	MAXIMUM
Number of drainlines	1	---
Length of each drainline	—	160 ft.
Bottom width of trench	12 in.	36 in.
Depth of earth cover of drainline	9 in.	—
Depth of Trench	—	—
Grade of lines	Level	3 in./100 ft.
Aggregate under drainlines	6 in.	
Aggregate over drainlines with:		
geotextile fabric	2 in. thick	—
other material	2 in. thick	—

ee)

(7) Disposal beds may be used in lieu of the trench method. A disposal bed consists of an area in which the entire earth content of the required absorption area is removed and replaced with aggregate products and drainlines or other approved alternative disposal components. The absorption surface area of the bed shall be at least 50 percent greater than the minimum required absorption surface area for trenches with a minimum of 225 square feet of bottom area. In addition, disposal beds shall conform to the following:

(8) A minimum of six inches of aggregate shall be placed below the invert of the drainlines.

(9) Up to an additional one foot of aggregate may be placed below the distribution pipes.

(10) The total absorption area shall be calculated utilizing the total bed bottom and sidewall area.

(11) The drainlines shall be placed a maximum of six feet on center in an absorption bed. Where two or more beds are used to obtain the necessary absorption area, there shall be a minimum ten-foot separation between the side-walls of adjacent absorption beds.

(12) For secondary and tertiary treated effluent, the minimum calculated absorption area required for conventional treatment may be reduced 30 percent, except when adsorption area is classified as Type IV soils, and the maximum trench depth may be no greater than ten feet. In no case shall the maximum reduction for the disposal absorption surface area exceed 30 percent.

(13) Depending on the type of disposal system being utilized, the disposal absorption surface shall be constructed level. Drainlines shall be placed at the same slope as the disposal absorption surface.

(14) The maximum length of drainlines for gravity systems shall not exceed 160 feet, and where two or more drainlines are used they shall be, as near as practical, the same length. The ends of two or more drainlines in bed and mound systems shall be connected to produce a continuous circuit. A continuous circuit arrangement is also recommended but not required for standard trench systems. The aggregate-soil interface shall be 12 inches to 24 inches from the end of a drainline. When more than 500 lineal feet of leach line is required, a low-pressure dosed system shall be used.

(15) At least 12 inches of soil cover shall be provided for drip disposal systems.

(16) Alternative disposal systems include, but are not limited to, cluster systems, evapotranspiration systems, mounds, subsurface irrigation, holding tanks, graywater systems, and others as approved by the county.

(17) Minimum spacing between trenches or leaching beds shall be four feet plus two feet for each additional foot of depth in excess of one foot below the bottom of the drainline. Distribution drainlines in leaching beds shall not be more than six feet apart on centers and no part of the perimeter of the leaching bed shall be more than three feet from a distribution drainline.

(i) Mineral aggregate. When installing a disposal system that uses mineral aggregate, all portions of the header pipe and perforated drainlines shall be installed in clean washed aggregate meeting the requirements in Table 6, Clean Aggregate.

ff)

(181) Table 6. Clean Aggregate

Sieve Size	2 IN.	1½ IN.	1 IN.	¾ IN.	½ IN.	3/8 IN.	NO. 4
Percent Passing	90—100	35—100	15—100	0—70	0—50	0—30	0—5

gg)

(1) Approved materials for disposal mineral aggregate are quartz rock, granite, river gravel, and other equally durable materials.

(2) A copy of the receipt for the aggregate shall be part of the documentation of aggregate size and quality, and records shall be available before or at the time of final inspection.

(3) The aggregate disposal system shall be protected from infiltration of earth backfill by an approved filter. The filter shall be placed on top of the aggregate only. The minimum earth cover over the top of the disposal system, distribution box, or header pipe in standard subsurface systems shall be nine (9) inches after natural settling.

(4) For gravity aggregate disposal systems, inside pipe diameter shall not be less than four inches. Perforated pipe shall have two rows of holes and a minimum perforated area of one and one-half square inches per linear foot. Perforations shall be located not less than 30 degrees, or more than 60 degrees, from the vertical on either side of the centerline of the bottom of the pipe. However, for disposal systems designed by a professional engineer, drainline perforation area and hole configuration may differ but shall assure that effluent is distributed as equally as possible throughout the disposal system.

(j) Seepage pits.

(1) Installation of seepage pits shall be by variance only.

(2) The minimum effective absorption area in any seepage pit shall be calculated as the excavated side wall area below the inlet pipe exclusive of any hardpan, caliche, rock, clay or other impervious formations. Bottom area is not included in absorption area.

(3) A six-inch layer of bentonite clay, or other approved material, shall be installed at the bottom of the seepage pit to restrict effluent flow through the bottom area.

(4) Multiple seepage pit installations shall be served through an approved distribution box or be connected in series by means of a watertight connection laid on undisturbed or compacted soil. The outlet from each seepage pit shall have an approved vented leg fitting extending at least 12 inches below the inlet fitting.

(5) Each seepage pit shall have an excavated horizontal dimension of not less than four feet and the maximum horizontal dimension shall not exceed the vertical dimension. Each such pit shall be lined with approved type whole, new, hard-burned clay brick, concrete brick, concrete circular type cesspool blocks or other approved materials.

(6) The lining in each seepage pit shall be circular and laid on a firm foundation. Lining materials shall be placed tight together and laid with joints staggered. Except in the case of approved type pre-cast concrete circular sections, no brick or block shall be greater in height than its width and shall be laid flat to form at least a four-inch wall. Brick or block greater than 12 inches in length shall have chamfered matching ends and be scored to provide for seepage. Excavation voids behind the brick, block or concrete liner shall have a minimum of six inches of clean three-fourths-inch gravel or rock.

(7) All brick or block used in seepage pit construction shall have a minimum compressive strength of 2,500 pounds per square inch.

(8) Each seepage pit shall have a minimum sidewall (not including the arch) of ten feet below the inlet pipe.

(9) The arch, cover or dome of any seepage pit shall be constructed in one of the following three ways:

a) Approved type hard-burned clay brick, solid concrete brick or block laid in cement mortar.

b) Approved brick or block laid dry. In both of the above methods, an approved cement mortar covering of at least two inches in thickness shall be applied, said covering to extend at least six inches beyond the sidewalls of the pit.

c) Approved type one or two piece reinforced concrete slab of 3,000 pounds per square inch minimum compressive strength, not less than five inches thick and designed to support an earth load of not less than 400 pounds per square foot.

(10) Each such arch, dome or cover shall be provided with a nine-inch minimum inspection hole with plug or cover and shall be coated on the underside with an approved bituminous or other nonpermeable protective compound.

(11) The top of the arch, dome or cover must be a minimum of 12 inches but not more than four feet below the surface of the ground. Risers must be provided to extend the arch, dome or cover to within 12 inches of the surface.

(12) An approved vented inlet fitting shall be provided in every seepage pit so arranged as to prevent the inflow from damaging the sidewall. When using a one or two piece concrete slab cover inlet, the inlet fitting may be an approved

one-fourth bend fitting discharging through an opening in the top of the slab cover.

(k) Evaporation ponds and systems.

(1) For total coliform, the quality of treated wastewater entering an evaporation pond shall be less than one colony forming unit per 100 mL as determined by the membrane filter method, or not present in any ten mL portion as determined by the MPN method.

a) Evaporation ponds shall be designed and installed in such a manner as to prevent storm water runoff from entering the component.

b) An evaporation pond shall be provided with a perimeter dike of such height that the effluent volume discharged to the pond combined with the precipitation from a 100-year frequency, 24-hour duration rainfall event, does not reduce the available freeboard to less than one foot below the top of the perimeter dike. These ponds shall be enclosed with a fence as required for swimming pools in the most current New Mexico Building Code.

c) The maximum surface area for any single pond is 1,000 square feet. If more than one pond is proposed, the ponds shall be placed in a parallel configuration with the flow evenly distributed between the ponds.

d) Evaporation ponds shall be watertight.

e) An evaporation pond shall be designed by a New Mexico licensed professional engineer.

(2) Evapotranspiration disposal system shall be designed and installed in such a manner as to prevent storm water runoff from entering the component.

a) The maximum surface area for any single cell is 1,000 square feet. If more than one cell is proposed, the cells shall be placed in a parallel configuration with the flow evenly distributed between the cells.

b) Evapotranspiration disposal systems shall be watertight.

c) An evapotranspiration disposal system shall be designed by a New Mexico licensed professional engineer.

d) Weather data that best represents the local area shall be used.

(l) Irrigation/reuse systems.

(1) Effluent may be used for irrigation provided that, at a minimum, it shall meet secondary treatment standards prior to use.

(2) The effluent may only be utilized subsurface and may only be utilized for watering non-edible landscaped areas, fruit trees, or nut trees.

(3) Application of the effluent resulting in standing or ponding of the effluent, whether liquid or frozen, shall be prohibited. The application of effluent shall not result in the effluent leaving the application area.

(4) Irrigation systems shall have no cross connections, direct or indirect, with potable water systems.

(5) All irrigation systems shall be pressure dosed to assure an even distribution and loading of effluent throughout the application area.

(6) All parts of the reuse system shall be protected from freezing.

(7) Effluent shall be contained on the permitted property.

(8) Secondary treated and disinfected effluent may also be used for toilet flushing or fire suppression with county approval.

(m) Mound systems.

(1) Mounds are generally constructed entirely above the surrounding ground surface, however, the mound may be partially buried.

(2) The design of the mound system shall be in accordance with the most current approved design standards of mound system.

(3) Pressure distribution to the mound shall be required.

(4) For type III and IV soils, mounds shall not be installed on slopes greater than six percent without a variance. For type Ia through II soils, mounds shall not be installed on slopes greater than 12 percent without a variance.

(5) The finished side slope of the mound shall be at a minimum 1:3 and at a maximum 1:4 vertical to horizontal slope.

(n) Low pressure dosed disposal systems.

(1) Low pressure dosed (LPD) disposal systems may be used to achieve uniform distribution of wastewater over the entire infiltrative surface. Effluent from this type of system is pumped under low pressure through solid pipe into perforated drainlines installed within a disposal system.

(2) Low pressure dosed disposal systems may be used with any on site wastewater system including conventional treatment systems, graywater systems and advanced treatment systems.

(3) Low pressure dosed disposal systems may be used with any disposal system including trenches, beds, mounds, gravelless systems, evapotranspiration systems and drip irrigation.

(4) Lift stations are not classified as low pressure dosed disposal systems.

(5) Low pressure dosed disposal systems may use a timer to equalize the flow over a 24-hour period. LPD disposal systems may also be designed to rotate between separate disposal areas by using rotator valves.

(6) Low pressure dosed disposal systems may use dosing siphons or pumps.

(7) All pumps shall be rated by the manufacturer for pumping sewage or effluent.

(8) A single pump may be used for design flows equal to or less than 1,000 gpd. Dual pumps are required for design flows over 1,000 gpd.

(9) Design of the LPD system shall include:

a) Design flow;

b) Soil absorption area sized according to the soil infiltration rates found in Table 4;

c) Spacing between drainlines with a minimum of two feet of separation;

d) Length of pipe;

e) Diameter of perforated drainlines used;

f) Size and spacing of holes or emitters; and

g) Pump performance sizing with allowances for head and friction losses at rated flows in gallons per minute.

(10) Approved proprietary drip irrigation systems shall be designed and installed according to manufacturer's specifications.

(11) A ball valve shall be located vertically at the terminal end of each lateral line for inspection and flushing (except for proprietary drip irrigation systems that include other means for this function).

(12) Drainlines shall be placed parallel to the natural contours of the site.

(13) The distribution holes in the drainlines shall be shielded or protected in some manner to prevent the infiltration of soil into the pipe.

(o) Low pressure pipe disposal systems.

(1) The low pressure pipe system shall be sized as follows:

a) The required absorption area shall be sized in accordance with subsection H of 20.7.3.703 NMAC.

b) A sizing credit of five square feet per linear foot of lateral pipe shall be applied to the total required absorption area.

c) Each individual lateral shall not exceed 75 feet in length from the feed point unless the design is such that the discharge rate between any two points in the system does not exceed ten percent.

(2) Design for LPP systems shall conform to the following:

a) The effluent discharged to a LPP system must meet, at a minimum, primary treatment standards.

b) Trenches shall be 12 inches to 18 inches wide and 12 inches deep.

c) When aggregate is used, the lateral pipe shall be embedded at or above the center of the column of aggregate.

d) The aggregate shall be covered with geotextile material to prevent soil intrusion.

e) If a proprietary drainfield product other than aggregate is used, the distribution pipe shall be placed so as to prevent soil intrusion into the pipe.

f) A minimum of four inches and a maximum of 18 inches of soil cover over the trench is required.

g) Lateral lines shall be placed parallel to the natural contours of the site.

h) Provisions shall be made for the prevention of siphoning back to the pump tank on upgrade systems and the prevention of draining of the tank on downgrade or flat systems.

i) All requirements for conventional disposal systems shall be met, including but not limited to, setback and clearance requirements, lot size, design flow calculations, septic tank sizing, prohibitions, wastewater characteristics and advanced treatment requirements.

j) Runoff shall be diverted away from the system to avoid oversaturation, where possible.

k) A vegetative cover shall be maintained over the disposal area.

(3) Materials and equipment for LPP systems shall conform to the following:

a) All treatment units and pump tanks shall meet the structural requirements of 20.7.3.501 NMAC.

b) The pump tank shall be a single compartment with a 500 gallon minimum useful volume and allowance to be made for tank volume between the pump intake and tank floor. For septic tank effluent, a separate pump tank, in addition to the septic tank, is required.

c) Effluent type pumps are required on all systems.

d) A system design shall demonstrate that the system comes to the design pressure during every pumping cycle.

e) An alternating valve or solenoid valve system is required to feed separate laterals with elevation differences resulting in 23 feet (ten psi) or greater

head differentials. Manual or automatic flushing valves with turn-ups are required on distal ends of all laterals.

f) In areas of freezing conditions, provisions for the draining of the headers must be made, such as vacuum breakers or vent holes at the system high points.

g) Pipe shall be rated at 160 psi minimum, ASTM compression drainpipe, schedule 40 or better.

h) The manifold pipe shall be sized appropriately for system size and configuration. The lateral pipe shall be one inch to two inches in diameter.

i) The orifice size shall be 5/32 -inch to ¼-inch for septic effluent and 1/8 -inch to ¼-inch for secondary and tertiary treated effluent.

j) The lateral pipe shall be installed with orifices facing upward.

(4) A maintenance contract shall be required on all LPP systems. Maintenance is to include pump inspection and cleaning, float operation (if applicable), and lateral flushing annually at a minimum and septic tank and pump tank pumping as needed.

(5) Designs that do not conform to the design parameters specified in subsections (a) and (b) above must be accompanied by documentation justifying the design submitted, including proprietary software input and output reports, and will be considered on a case-by-case basis.

(p) Split flow disposal systems. Split flow systems may be installed for the purpose of reduction of total nitrogen discharges in lieu of installation of non-discharging or tertiary treatment systems.

(1) Based on the assumption that toilet waste contains 80 percent of the total nitrogen in domestic liquid waste and that the quantity of liquid waste from toilets is 25 percent of the total domestic waste stream, the following formula shall be used to calculate the minimum lot size allowed for permitting of a split flow system: minimum lot size (in acres) = 0.0003 x design flow.

(2) The disposal system for non-toilet waste shall be based on the assumption that non-toilet waste comprises 75 percent of the design flow and therefore may be reduced to 75 percent of the minimum required absorption area in 20.7.3.703 NMAC.

(3) The toilet waste holding tank shall have a minimum capacity of 1,000 gallons and shall meet all requirements of holding tanks described in 20.7.3.808 NMAC, except for subsections (a), (b), (c), (d), (e) and (h).

(4) Effluent from the waste holding tank may be discharged to an ET bed constructed in accordance with 20.7.3.805 NMAC and sized at 25 percent of design flow. An effluent filter is required on the waste holding tank.

(q) Sand-lined trenches and bottomless sand filters.

(1) Effluent applied to a sand-lined trench shall not exceed primary treatment standards.

(2) The required absorption area shall be calculated based on a maximum loading rate of 1.00 gallon per day per square foot of sand surface. No sidewall credit is allowed.

(3) The distribution system shall conform to the requirements of 20.7.3.807 NMAC, Low Pressure Disposal Systems.

(4) A minimum of 24 inches of sand, meeting the latest version of ASTM specifications, shall be installed beneath the distribution system.

(5) Trench width shall be a minimum of 12 inches and a maximum of 36 inches.

(6) The effluent dosing rate shall be at least four doses per day and not more than 24 doses per day.

(7) A sand-lined trench may be used to reduce setbacks and clearances as follows:

a) One foot to a limiting layer;

b) Fifty feet to waters of the state; or

c) Fifty feet to an irrigation well located on the subject property.

(8) A bottomless sand filter is a special case sand-lined trench consisting of a bottomless containment structure located partially above or at grade of the existing ground level. A bottomless sand filter must be located parallel to the contours on a sloping site and be as long and narrow as possible to limit the linear loading rate on the disposal area.

(9) A maintenance contract shall be required. Maintenance is to include pump inspection and cleaning, float operation (if applicable), and lateral flushing annually at a minimum and septic tank and pump tank pumping as needed.

(r) Other non-specified systems/additional requirements.

(1) Other system types not specifically described in this division shall be considered on a case-by-case basis. If such systems are proposed, they shall first be evaluated, as a minimum, against any applicable state regulation.

(2) Additional system construction, monitoring, and maintenance requirements may be imposed as deemed necessary by county staff to ensure protection of the public health and safety and protection of ground water, surface water, and stormwater quality.

(Ord. No. 2014-17, § 1, 10-28-14)

hh) Sec. 42-511 - Setback Requirements.

Wastewater system treatment, holding, and disposal components shall meet the minimum setback distances outlined in this Table 7, Minimum Setback Distances. Modified offset distances for sand-lined trenches are noted in section 42-510(o)(7) of this division.

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Table 7. Minimum Setback Distances

From: / To:	Building Sewer	Treatment Unit [a]	Disposal Field	Seepage Pit
Property lines	Clear	5 ft.	5 ft.	8 ft.
Building or structure	2 ft.	5 ft.	8 ft.	8 ft.
Distribution box	—	—	5 ft.	5 ft.
Disposal field	—	10 ft.	4 ft. [d]	10 ft.
Seepage pit	—	5 ft.	5 ft.	12 ft.
Drinking water line [e]				
—private	1 ft.	10 ft.	10 ft.	10 ft.
—public	10 ft.	10 ft.	10 ft.	10 ft.
Drinking Water Source / Wells/ Watercourse:				
—Private	50 ft.	50 ft.	100 ft.	100 ft.
—Public	50 ft.	100 ft.	200 ft.	200 ft.
Irrigation well	50 ft.	50 ft.	100 ft.	100 ft.
Lined canals	—	10 ft. [b]	10 ft. [b]	10 ft. [b]
Unlined canals, drainage ditches	—	15 ft. [b]	25 ft. [b]	25 ft. [b]
Arroyos	—	15 ft. [b]	25 ft. [b]	25 ft. [b]
Waters of the State	—	50 ft.	100 ft.	100 ft.
Retention/detention area	—	15 ft.	15 ft.	15 ft.
Seasonal high water table, bedrock and other impervious layers [c]	—	—	4 ft. to bottom of system	4 ft. to bottom of system
Swimming Pools	5 ft.	10 ft.	15 ft.	15 ft.

[a] Applies to enclosed systems and other wastewater treatment units.

[b] Plus depth of channel.

[c] Unlined privy pits shall provide clearance of at least four feet.

[d] Plus 2 feet for each additional foot of depth in excess of one foot below perforated pipe.

[e] Or applicable plumbing code.

ii)

(182) (Ord. No. 2014-17, § 1, 10-28-14)

jj)

kk) Sec. 42-512. - Installation Requirements.

(a) A wastewater system treatment or disposal component shall be level.

(b) Wastewater system components utilizing soils shall not be installed if the soil is frozen at the infiltrative surface of the component.

(c) Snow cover shall be removed before excavating or installing wastewater system components utilizing soils.

(d) If wastewater systems are installed in fill material, the fill material shall be of a soil material suitable for wastewater disposal. The appropriate documentation, which indicates the fill material is suitable, shall be provided to the county.

(e) All components of a wastewater system shall be installed in accordance with the permit approval.

(f) If any portion of a new, replacement, or modified wastewater system is to be located within a floodplain, a variance permit will also be required and will address appropriate setbacks and protective mitigation measures.

(Ord. No. 2014-17, § 1, 10-28-14)

ll) Sec. 42-513. – County Inspections.

(a) To ascertain whether the wastewater system conforms to this division, to any permit or plans approved by the county, or to the conditions of approval, the county may inspect the installation, modification, operation, or maintenance of a wastewater system, and collect samples for analysis. The county may also issue orders requiring the correction of errors or deficiencies, or otherwise enforce this division as provided by law.

(b) When a permit is required, no part of a wastewater system shall be covered, nor any wastewater system component put into service until the county has inspected the system in accordance with this section and the permit.

(c) The permittee shall notify the county when the installation or modification of the wastewater system will be or is ready for an inspection. The county may require at least a 24-hour notification for each inspection. Saturdays, Sundays, and county-recognized holidays shall not be included in the calculation of this 24 hour period. The notification shall be in person, in writing, by telephone or other electronic communication as directed by the county.

(1) Prior to the final inspection by the county, the installer shall certify that the installation of the system complies with the approved design and installation

requirements, and provide the county with one set of scaled as-built drawings. Wastewater systems that were required to be designed by a professional engineer shall be certified by the professional engineer.

(2) Final inspection approval shall not be granted until the county has confirmed that all requirements of this division are in compliance with plans and specifications submitted with the permit application.

(3) If the system installation or modification does not pass an inspection, the county shall notify the installer and provide the installer with a corrective action list. The installer shall make all required corrections and notify the county of the completion of the affected work, and request re-inspection of the system. The county may require at least a 24-hour notification prior to reinspection.

(4) A re-inspection fee may be charged to the permittee for each additional inspection associated with the corrective action list. The county may issue an order directing an immediate cessation of the installation of a wastewater system or the modification to an existing wastewater system as appropriate.

(5) The county may require a flow test be performed through the system to the point of effluent disposal. All lines, except disposal lines and components shall be watertight. Capacities, required air space, and fittings shall meet the requirements of the State of New Mexico.

(6) The county may require operational testing of advanced treatment components to verify initial functioning.

(7) A building or structure shall not be occupied until final inspection approval has been obtained.

(8) The county may require additional departmental inspections in addition to those specified under this division.

(9) To assure compliance with the conditions of the permits, the county may, periodically, inspect those wastewater systems that receive commercial wastewater.

(d) Testing of systems prior to operation. Before being put into service, the components of a wastewater system shall be hydraulically tested by the installer in accordance with the manufacturer's specifications or as otherwise specified in the permit. Operation shall commence only if the results of the tests confirm that the wastewater system meets the applicable manufacturer's specifications, permit conditions, and any other requirements as outlined in this division.

(e) Locating of wastewater systems. The county may record the location of the wastewater system electronically, such as by using global positioning system

equipment, during inspection. The county may maintain a record of these locations in an electronic format.

(f) Photo inspections by the installer and provided to/coordinated with the County may be allowed on a case-by-case basis. The use and the requirements for photo inspections will be at the discretion of the County and requirements will be provided to the installer prior to the photo inspection being scheduled. The County may, at its discretion, reject a photo inspection and require an in person inspection. No reinspection fee will be required in this situation for the initial in-person inspection.

(Ord. No. 2014-17, § 1, 10-28-14)

mm) Sec. 42-514. – Operation and Maintenance and Periodic Inspection Requirements.

a. The owner of the wastewater system is responsible for properly operating and maintaining the wastewater system system in accordance with the recommendations of the manufacturer or designer of the system.

b. Household hazardous waste and high strength waste shall not be introduced into the system. Any spillage that may occur during tank pumping or during inspection, or overflows/spills due to system failure or malfunction, shall be cleaned up immediately and the spill area disinfected with a sodium or calcium hypochloride solution.

c. The owner of the system, including systems existing prior to the effective date of this division, shall also be responsible for and ensure that the wastewater system is maintained in accordance with the county-approved management plan and permits,

d. The periodic pumping and inspection of wastewater system holding and treatment components, including septic tanks and holding tanks, is required as specified in the county-approved management plan.

e. The owner of an advanced treatment system, including graywater systems designed to dispose greater than 250 gallons per day, shall enter into a maintenance contract with a qualified maintenance service provider. A maintenance contract shall be in effect at all times to provide for inspecting, monitoring, and maintaining the advanced treatment system in accordance with the recommendations of the manufacturer or designer of the system. The owner of the system is responsible for ensuring inspection, monitoring, and maintenance of the wastewater system occurs.

(a) At the completion of an inspection or pumping event, the maintenance person shall,within ten days of the date of inspection or pumping event, submit documentation of the event to the owner of the system. Records shall be kept by the maintenance person and made available to the county upon request. The county may require from the owner verification of any information contained in the event documentation. Documentation shall include the following information:

a) The wastewater system permit number; and

b) The address of the property where the system is located; and

c) The date of inspection or pumping; and

d) The name, address, and phone number of the person performing the inspection, maintenance, or pumping; and

e) Checklist used to perform the inspection; and

f) Results of the inspection and type of maintenance performed; and

g) Any other information required by the approved management plan.

(Ord. No. 2014-17, § 1, 10-28-14)

nn)

oo) Sec. 42-515. - Monitoring.

(a) Wastewater systems that require advanced treatment shall be monitored as specified in this division. Parameter and maintenance requirements shall be included in the permit application design statement and be consistent with the manufacturer's recommendations.

(b) The owner of a wastewater system shall permit maintenance personnel right of entry to the property at reasonable times to allow for maintenance, system monitoring, effluent sampling or evaluating the general state of repair or function of the system.

(c) Advanced treatment systems shall be maintained and monitored at least semi-annually. Parameters shall be measured at locations that demonstrate the effectiveness of the treatment and will, at a minimum, include the following parameters and instrumentation:

(1) Dissolved oxygen (DO),with calibrated DO Meter, and

(2) Temperature, with thermometer, and

(3) pH, with calibrated pH meter, and

(4) Sludge depth, with sludge sampler, and

(5) Other parameters and instrumentation recommended by the manufacturer.

(d) If effluent sampling is required due to the systems not conforming to manufacturer's guidelines for field parameters, the lack of manufacturer established field parameters, or if the system has been determined to not be operating properly, the following sampling shall be conducted at least annually or more frequently as determined by the county. At a minimum:

(1) Wastewater systems that require secondary treatment levels be achieved shall be sampled and analyzed for five-day BOD quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the county, to meet the requirements of the permit. Chemical oxygen demand (COD) may be substituted for BOD5 with an acceptable calibration curve as approved by the county.

(2) Wastewater systems that require tertiary treatment levels be achieved shall be sampled and analyzed for total nitrogen quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the county to meet the requirements of the permit.

(3) Advanced systems requiring disinfection shall be sampled and analyzed for fecal coliform quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the county. In addition:

(e) When chlorine is used for disinfection, the total chlorine residual, at all times, shall be equal to or greater than 1.0 mg/l after 30 minutes detention time at peak flows; and

(f) Alternative disinfection methods, such as ultraviolet light, ozone or other methods, may be utilized after county approval.

(g) All sampling and analysis shall be performed by certified personnel in accordance with the most current edition of Standard Methods for the Examination of Water and Wastewater or other methods, including field instruments, approved by the county.

(h) Sampling shall occur between the hours of 7:00 a.m. and 7:00 p.m.

(i) Monitoring (sampling and analysis) reports shall be submitted to the county within 30 days of the required sampling event.

(j) All test results exceeding the permit limits shall be reported to the county within five working days of receipt of analysis by the owner, evaluator, or contractor.

(k) Sampling frequency for systems exceeding permit limits after the exceedance shall be quarterly for the first year, semi-annually for the second year, and yearly thereafter, unless otherwise specified in the permit.

(l) If any two consecutive samples exceed the single sample limit, the system design and operation shall be evaluated by a professional engineer or a maintenance service provider for conformance with permitting conditions and shall be adjusted to bring the effluent quality into compliance.

(m) If the six-sample rolling average exceeds the treatment standards specified in Table 1, the treatment system shall be subject to review and re-evaluation with regard to operation and maintenance. A county approved contingency plan,

including more training for the maintenance service provider or replacement with a more experienced operator, may be implemented.

(n) The following shall be considered as violations of the monitoring requirements of the permit:

(1) Failure to collect, analyze and report sampling results.

(2) The submission, by the owner or maintenance entity of an advanced treatment system or agent or employee thereof, of fraudulent, misleading or inaccurate information to the county, through neglect.

(3) The submission of fraudulent data including the following:

a) Apparent measurement results for which no measurement or test results were actually made as determined by the absence of the supporting records that are usually made;

b) Measurements or test results obtained by deliberately and knowingly making measurements or collecting samples at places and times other than as specified in the permit or Section 20.7.3 NMAC; and

c) Test results obtained through use of unapproved and erroneous sampling, preservation, storage or analysis procedures.

(Ord. No. 2014-17, § 1, 10-28-14)

pp) Sec. 42-516. - Reserved

(Ord. No. 2014-17, § 1, 10-28-14)

qq) Sec. 42-517. System Evaluations

System evaluations, at the expense of the owner, can be required by the County if a system is suspected of being in a failing condition, prior to transfer/change of ownership of a property (Section 42-518 of this division), is unpermitted (Sections 493 and 498) or based on the age of the system (Section 42-519 of this division).

(a) System evaluations will only be accepted from a qualified system evaluator as defined in Section 42-499(c). Evaluators shall submit copies of all evaluation reports, regardless of reason for the evaluation, the outcome of the evaluation, and whether completed or not. All results and reports shall be submitted to the county within 15 calendar days of the evaluation.

(b) Evaluation reports shall be recorded on forms approved by the county and shall be kept on file by the evaluator of the on-site wastewater system.

(c) At a minimum, the evaluation will address the following items:

(1) The GPS coordinates of the wastewater tank.

(2) The sludge and scum levels shall be determined and the septic tank pumped as needed.

(3) The effluent filters shall be cleaned and replaced if damaged or not found in place.

(4) The disposal area shall be visually evaluated for proper operation.

(5) The treatment unit will be visually inspected to determine whether the unit is water tight, is functioning properly, and the existing tank size is within one tank size of the capacity required.

(6) The system meets lot size requirements in effect at the time of installation or most recent permit modification and/or meets design flow requirements for the current construction present on the site at the time of the inspection.

(7) The setback and clearance requirements will be evaluated to ensure compliance with the requirements in effect at the time of installation.

(8) The system shall be evaluated to determine whether it poses a threat to public health or a safety hazard exists.

(9) And for advanced treatment systems

a) Sampling results that have occurred within no more than 180 days of the inspection shall be included with the evaluation report. If a sampling event has not occurred within the last 180 days of the evaluation, the system shall be sampled in accordance with permit conditions and for the purpose of demonstrating compliance with the design and treatment standards of Section 42-508 of this division.

b) Inspection and testing to ensure that the system is in compliance with Sections 42-514 and 42-515 of this division.

(d) The evaluation shall address the portions of Sections 42-507(a) and Table 1, 42-516, and 42-518 of this division that are relevant and shall result in a preliminary status as "acceptable" or "unacceptable". If such an evaluation was previously performed within the preceding five years, proof of such evaluation submitted to the county will be accepted in lieu of having a new evaluation performed. Documents describing the evaluation shall be submitted to the county in a format prescribed by the county

(1) An "Acceptable" rating from the system evaluator documents that the existing system:

a) Is not failing and that there are no major deficiencies with the system that require replacement or modification of the system.

b) It does not mean that repairs or variance requests many not be needed. It does not address the life expectancy or state of compliance of the system with respect to all provisions of the current wastewater ordinance.

c) "Acceptable" ratings shall be accepted by the county unless significant errors or deficiencies with the evaluation are noted, in which case the county may perform a subsequent inspection or request a reevaluation.

d) An "Acceptable" rating once accepted by the county may not be appealed.

e) Systems receiving an "Acceptable" rating and greater than 30 years in age shall undergo an evaluation at least once every five years thereafter.

(2) An "Unacceptable" rating for the system evaluator documents that:

a) Failure of at least one critical component of the system (e.g. tank, drainfields, mechanical equipment) is occurring or has occurred.

b) All "Unacceptable" ratings by the evaluators will be reviewed by the county staff.

c) An "Unacceptable" rating that is accepted by the county staff solely on the basis of the evaluator's system document can be appealed under the process specified in Section 42-521 of this division.

d) Or alternately, the owner may waive the appeal and request a site inspection to be completed by the county within 30 days. In such cases, any contractor arrangements and expenses shall be borne directly by the owner, and the subsequent rating determination by county staff is final and is not subject to appeal.

e) In the event of an "Unacceptable" rating, that includes, but is not limited to disposal fields, the owner shall apply for a wastewater permit from the county before replacing or modifying the failed system, or shall connect to sewer if available.

(Ord. No. 2014-17, § 1, 10-28-14)

rr) Sec. 42-518. – Permit Status and Transfer of Property / Change of Ownership

Wastewater, wastewater operating, holding tank permits, and variance permits are not transferable and expire 30 calendar days after the transfer of ownership of a property occurs.

(a) Prior to property transfer the owner shall have the wastewater system evaluated per Section 517 of this division to demonstrate that the system is in good operating condition and at a minimum, meets the criteria listed in Section 42-517 of this division.

(b) The evaluation shall be provided by the owner to the county and to the buyer within 15 days of the date of the evaluation.

(c) For an advanced treatment system, the buyer shall enter into a maintenance agreement for the wastewater system and shall ensure compliance with Section 42-414 and Section 42- 515 of this division.

(d) The buyer is responsible to ensure that the evaluation and if needed, the new maintenance agreement, are on file with the county and to file an application for a new wastewater operation permit, change of ownership, and/or related variance permits in a timely manner.

(e) If the system received an "Acceptable" evaluation (Section 42-517 of this division) prior to the time of sale, but the evaluation was not filed with the County, and/or the buyer fails to remedy the lack of an evaluation or maintenance agreement being on file, and/or the buyer did not apply for a new operating permit and/or change of ownership, all within 30 days of sale, the system shall be deemed an unpermitted system. Unpermitted systems are required to connect to sewer per Section 42-498 of this division if sewer is available regardless of the operability or condition of the wastewater system. Such systems may only be repermitted if sewer is not available.

(Ord. No. 2014-17, § 1, 10-28-14)

ss) Sec. 42-519. - Aging Systems

(a) Any property owner with an existing wastewater system greater than 30 years in age, and whether or not previously grandfathered, shall have the system evaluated per Section 517 of this division according to the following schedule.

(1) Systems known or suspected to have been constructed prior to January 1, 1985 shall be evaluated by December 31, 2020.

(2) Systems known or suspected to have been constructed between January 1,1985 and December 31, 1989 shall be evaluated by December 31, 2025.

(3) Systems known or suspected to have been constructed between January 1, 1990 and prior December 31, 1994 shall be evaluated by December 31, 2030.

(4) Systems known or suspected to have been constructed between January 1, 1995 and December 31, 1999 shall be evaluated by December 31, 2035.

(5) Systems known or suspected to have been constructed after January 1, 2000 shall undergo evaluation within 60 days of the 30 th anniversary of construction.

(b) Systems receiving an "Acceptable" evaluation will, then have the system reevaluated at least once every five years thereafter. Systems receiving an

"Unacceptable" evaluation will either connect to sewer if available (Section 42-498 of this division), or shall have the system repaired, replaced, and repermitted to ensure the system is in sound operating conditions under current code requirements.

(c) Systems with an "Acceptable" evaluation, or those having undergone repairs as a result of an "Unacceptable" evaluation, shall be issued an "Evaluation Permit" after payment of the associated permit fee, with such permits expiring the December 31 five years following the date of issuance. Systems with lapsed Evaluation Permits shall be considered and addressed as an unpermitted system.

(Ord. No. 2014-17, § 1, 10-28-14)

tt) Sec. 42-520. – Variances and Exceptions.

The wastewater permitting process is under the control of Bernalillo County per memorandum of understanding with the State of New Mexico, and the determination of the need and appropriateness for a variance to its wastewater ordinance is made solely by Bernalillo County staff.

(a) Variances in General.

(1) Any owner seeking a variance from the requirements contained in this division shall do so by filing a variance application form provided by the county. The application shall be:

a) Accompanied by relevant documents or materials which the applicant believes would support the application; and

b) Accompanied by documentation, including addresses, demonstrating that all owners of property sharing a common border with the lot for which the variance is sought have been notified of the nature of the variance application, the date of submission of the application to the county, unless all adjacent properties are more than 1,000 feet from the wastewater system for which the variance is sought; and

c) Accompanied by such other relevant information as the county may reasonably require; and

d) The application shall be completed in full, signed by the owner or the owner's authorized representative, if any, and accompanied by all required exhibits and fees. If the owner of a property uses an authorized representative, a signed statement from the owner of the property assigning authority for the representative to act on the owner's behalf during the application review process shall accompany the application.

(2) The county shall, within 20 business days following receipt of the completed application and associated fee, respond to the variance application. The county shall grant the variance, grant the variance subject to conditions, or deny the variance. The county shall provide written notification to the applicant and

any other person making a written comment concerning the application. The reason for the county's action shall be provided in writing.

(3) The county shall deny the variance unless the applicant establishes by clear and convincing evidence that:

a) The variance application offers an alternative method or means of complying with the intent of the specific provision of this division proposed for variance; and

b) The proposed wastewater system or modification of an existing system shall not, by itself or in combination with other wastewater systems or other discharges permitted under state or federal law, cause a hazard to public health or degrade any body of water.

(4) When reviewing variance applications the county may consider, among other matters, the geological and hydrological factors at the site, the current and future housing density in the area, and current and future use of the water that could be affected by the proposed system.

(5) The variance shall specify the expiration date, the conditions of approval, and the conditions for renewal.

(6) Variances may be appealed by any aggrieved party following the process outlined in Section 42-521 of this division.

(7) The county shall maintain a publically available file of all variances requested, granted, and denied.

(8) Obtaining a variance does not negate the need to obtain permits or approvals as required by this division. The variance may be submitted as a supporting document.

(9) A variance is required for any reduction in setback distances shown in Table 7. Additionally, the following requirements for a reduction in setback distances also applies:

a) From a private drinking water well located on the same property to any distance less than 100 feet, tertiary treatment and disinfection are required.

b) From a private drinking water well not located on the subject property, to any distance less than for any reduction in distance, tertiary treatment and disinfection are required.

c) From a public water supply well for any reduction in distance, tertiary treatment and disinfection are required.

(10) Sand lined trenches may be used in limited instances as allowed by New Mexico state regulations to reduce required setbacks or clearances due to a

limiting layer, distance to waters of the state, and distance to an irrigation well located on the same property

(b) System Replacement - Lot Size/Adjacent System Setback Exceptions.

(183) No new, conventional treatment system shall be installed on a lot sized smaller than three-fourths-acre. Replacement of an existing treatment of any type, including conventional systems, may be installed on a lot size smaller than that specified by Chart 1, provided that the replacement system meets the remaining relevant requirements of Sections 42-507 and 42-508 of this division, and that one or more of the following conditions are satisfied:

(4) Ground water does not exist below the lot as evidenced by a driller's log for a well or testhole drilled on the subject or an adjacent lot and filed by a New Mexico-licensed water well driller with the office of the state engineer.

(5) The uppermost ground water beneath the lot contains a total dissolved solids concentration greater than 10,000 mg/L, as evidenced by a signed analysis report from a state or commercial analytical laboratory and with the sample having been taken from a representative well or test hole on or within a one mile radius of the lot and completed within and representative of the uppermost ground water zone beneath the lot, as documented by a driller's log from a New Mexico licensed water well driller and filed with the office of the state engineer.

(6) The uppermost ground water occurs under confined conditions, as evidenced by an artesian condition drilling plan for a representative well or test hole on or within a one mile radius of the lot and filed by a New Mexico licensed water well driller with the office of the state engineer.

(7) The uppermost ground water beneath the lot occurs at a depth greater than 400 feet and with one or more aerially extensive geologic strata in the vadose zone that may act as a capillary barrier, as evidenced by a driller's log and accompanying geophysical log for a representative well or test hole on or within a one mile radius of the lot filed by a New Mexico licensed water well driller with the office of the state engineer.

(8) The uppermost ground water occurs at a depth greater than 600 feet as evidenced by a driller's log for a representative well or test hole on or within a one mile radius of the lot and filed by a New Mexico licensed water well driller licensed with the Office of the State Engineer.

(9) If in the opinion of staff charged with administration of this division, sufficient relevant scientific documents, maps, or reports limited to those published by New Mexico universities, and/or state and federal agencies, or a site-specific geology/hydrology report signed and sealed by a licensed geologic or engineering professional, and pertaining to geology, hydrogeology, and/or ground water quality of the subject lot, provides an adequate basis to formulate such a technical opinion on the above listed conditions.

(10) Adjacent wastewater systems. If the subject system is no closer than 120 feet to any disposal system on an adjacent lot, or alternately, that the replacement system is no closer than the minimum set back from any adjacent system as determined by the following formula:

$(R=\sqrt{A}/\pi)$,

R=radius of circular area in feet (the required set back distance),

$\sqrt{A}$, = the square root of the subject design flow x 87.12, and

π (or pi) = 3.1416.

(11) If none of the preceding exceptions are met, a calculation shall be made which accounts for the mass loading rate (MLR) for nitrate loading from the subject and adjacent properties.

1. If the resulting MLR from the calculation below is less than or equal to 75 lbsN/acre-yr, then the replacement system can be of the same type, but in conformance with current relevant requirements for that type system.
2. The calculation shall be based on the summed area and summed nitrate loading from the subject and adjacent properties areas following after the equation from McQuillan (2004), Hydrogeologic Analysis of On-Site Septic System Lot Size, with the variations listed below:

MLR (lbs/ac-yr) =

Σ[Q(gal/day) x C (mg/L) x 2.2x10-6 (lbs/mg)] x 365 (day/yr) x 3.78 (L/gal) x 1/ΣA(acres)

Where:

A = sum of the areas of the subject and adjacent properties

Q = designed wastewater flow rate (gals/day) of a given system

C = Total Nitrogen concentration of outflow from a given system (mg/L)

Acreage (A) will be determined based on the area provided in the platted parcels database of Bernalillo County.

uu) No credit or multiplier will be assigned to account for roadways or other features.

vv) In the event the subject property is adjacent to a property that is either connected to sewer or does not otherwise require use of an on-site wastewater system, the adjacent property, if larger than the subject property, shall be credited as the same area of the subject

parcel, but with no associated nitrate loading, or if smaller, than the as the smaller area.

Flow rate (Q) will be determined in the following order:

1) on actual measured value as previously reported to this department,

ww) as determined from permit design information on record with this department,

xx) on the basis of Section 42-509(c) of this division.

Concentration (C) will be determined in the following order:

2) on actual measured value as previously reported to this department,

yy) as determined from permit or design information on record with this department,

zz) at an assumed concentration of 70 mg/L (typically 50—90 mgN/L from University of Minnesota Onsite Sewage Treatment Program Fact Sheet http://septic.umn.edu/factsheets/systemperformancemonitoring 5/14/14).

(12) For a replacement conventional or replacement secondary or tertiary treatment system without disinfection, if a previous exception is met, but required set back distances from private drinking water wells and public water supply wells cannot be met, the replacement system may still be allowed. The exception requires that:

a) documentation is provided with the permit application demonstrating that all owners of property immediately adjacent to the lot for which the application is sought, and owners of properties with known well locations within 200 feet of the proposed system, have been notified of the nature of the permit application.

1. documentation shall include addresses, the date of submission of the application to the County, a general site map showing the adjacent property boundaries, and the intended set back distances from all known well locations within 200 feet of the replacement system.

(c) Connection to Sewer

Variance to requirements for connection to "available" sewer as defined in this division, and to connection as required by Section 42-498 of this division, requires submittal of a variance application.

(13) The variance application must include:

b) A site map showing the location of the subject parcel, the location of identified available sewer lines, available easements and right-of-ways, and other such information requested by the County engineer or designee.

2. Availability/Serviceability letter from the providing utility.

3. Copies of determination letters from the County, utility, and other stakeholding agencies identifying the amount and type of financial assistance/cost sharing arrangement that is available to the applicant.

4. Written cost estimate (acceptable to and considered reasonable by the County Engineer or designee) for installation, construction and permitting of an on-site wastewater system meeting the requirements of this division.

5. Written quotes and cost estimates (acceptable to and considered reasonable by the County Engineer or designee) for proposed work required to provide for the collector line extension including, but not limited to:

3) Cost for sewer line extension including all required infrastructure, trenching, construction, pavement repair, or other construction related costs.

aaa) Engineering design fees and costs

bbb) Payment of pro rata fees due at time of development related to sewer infrastructure expansion

ccc) Utility expansion charges

ddd) Permit and administrative fees

eee) Other costs that applicant deems pertinent, and agreed to by the County Engineer or designee as customary and appropriate, but not including annual debt service costs, operation and maintenance costs, or other lifecycle costs.

(14) The County Engineer or designee may grant a variance to the "must connect requirements" of Section 42-498 of this division based on a determination that:

a) for an existing residence(s), existing structure(s), or existing project(s) located on a residential or agricultural zoned lot with an existing permitted wastewater system and within 200 feet of an available sewer line, that:

4) the present value of the total cost of design, construction and connection to sewer, less any financial assistance/cost sharing arrangement provided, would exceed the greater of $25,000 or twice the cost of an appropriate replacement on-site wastewater treatment system.

1. for an existing establishment(s), existing structure(s), or existing project(s) located on other than a residential or agricultural zoned lot with an

existing permitted wastewater system within 500 feet of an identified sewer line, that:

5) the present value of the total cost of design, construction and connection to sewer, less any financial assistance/cost sharing arrangement provided, would exceed the greater of $50,000 or twice the cost of an appropriate replacement on-site wastewater treatment system.

(15) The County Engineer or designee, in consultation with the providing utility, may grant a variance for connection of new construction, new projects, or unpermitted systems, or for existing on-site wastewater systems, if the applicant can sufficiently demonstrate to the satisfaction of the County Engineer, that particularly special or unusual technical or financial circumstances, technical infeasibility, or net environmental considerations warrant the use of an on-site wastewater treatment system in preference to connection to municipal sewer.

(d) Wastewater System Installation In Special Flood Hazard Areas, Drainage Easements, and Drainage Ways

(184) Onsite waste disposal systems shall be located, to minimize or eliminate infiltration of floodwaters into the systems and discharge from the system into floodwater, as well as to avoid impairment to or contamination from the system due to flooding to the maximum extent practicable.

(185) Wastewater systems for new construction shall not be installed/constructed within designated surface water retention or detention structures or drainage conveyances to such structures, within incised channels, or within active channels or within ditches.

Variances for installation, replacement, repair or modification within the floodplain of special flood hazard areas and/or drainage easements shall only be issued upon a determination that the variance is the only remedy available, considering the flood hazard, to afford relief.

In providing such determinations, the Floodplain Administrator shall, in addition to requirements herein, consider relevant factors listed in Chapter 38-73(a) or succeeding sections.Such variances shall require approved by signature of any two of the County Engineer or designee, the County Floodplain Administrator, or the County Drainage Engineer.

(16) Located within Special Flood Hazard Areas are designated Floodways. The floodways are considered as hazardous due to the velocity of floodwaters and erosion potentials and other factors.

b) Variances and encroachments into floodways (including fill, new construction, substantial improvements and other developments) shall not be issued within any designated floodway unless certification by a

registered professional engineer is provided demonstrating that no increase in flood levels or adverse realignment would occur during the base flood discharge as a result of allowing such a variance.

2. Variance requests within floodways shall also require that the on-site disposal system design be certified by a professional engineer and that the professional engineer oversees and certifies the construction and installation of such systems in accordance with this Division and in compliance with the variance provisions.

3. When a regulatory floodway withing a Special Flood Hazard Area has not been designated, the floodplain administrator must require that no new construction, substantial improvements, encroachment or other development (including fill) or placement of wastewater systems or components shall be permitted within Zones A1—30 and AE on the community's FIRM, unless it is demonstrated that the effect of the variance will not increase the water surface elevation of the base flood more than one foot at any point within the community.

(17) In special flood hazard areas, but outside of the designated floodways, wastewater systems design and installations shall be in accordance with the requirements of this division and variance provisions but need not be certified by a professional engineer unless specified in the following requirements or as specifically requested by the County Engineer or designee, the County Drainage Engineer, or the Floodplain Administrator.

All new construction, replacement, and modifications of wastewater systems within special flood hazard areas shall comply with all applicable flood hazard reduction provisions of this section and additional provisions as may be specified in the approved variance.

(18) Local authorities do not have the de facto jurisdiction to require, require review, require approval, or alter a variance issued by the County, but the jurisdiction of special flood hazard is not exclusive. In particular AMAFCA and the MRGCD, where applicable, may share jurisdiction in matters of flood control and stormwater quality. These entities may have overlapping jurisdiction if such a variance occurs within their dedicated easements, if the variance somehow impinges of flow of stormwater through the designated floodplain under their jurisdiction, or if such authority is specifically granted by state charter.

Based on concerns of the local flood control authority staff, the following variance process and permit evaluation applies for installation of wastewater systems in floodplains and drainage ways.

c) The variance application shall include the following three permit screening questions and floodplain and grading and drainage plan information.

6) Is the parcel located within the local flood authority jurisdiction and does the parcel include any delineated special flood hazard areas?

fff) Does the parcel include a designated local flood authority easement?

ggg) Does any arroyo or drainage crossing the property have a designated flow rate in excess of 30 cfs under the RTI hydrologic maps for the North Albuquerque Acres area?

hhh) Per Section 42-501(e)(8) all site plans supporting a wastewater permit application shall delineate the extent of any designated floodplains on the subject parcel.

iii) If a grading and drainage plan is also available or in preparation for the site, the grading and drainage plan shall also include the location of the proposed wastewater system and will be provided in addition to the site plan as part of the application submittal

1. If the elements in 1), 2), or 3) above are not identified or otherwise addressed, the permit shall not be accepted for review – i.e. it is an incomplete application under provisions of 42-501(B)(8)
2. If the answer to any question under 1), 2), or 3) above is "Yes", the permit, if otherwise accepted for processing, shall be reviewed by the County, but will be statused as "corrections needed" with a note indicating that local flood control authority or other jurisdictional agency review and acceptance of the proposed on-site wastewater system placement is required before the application and/or variance will be issued.
3. The applicant shall then be directed to submit the site plan and/or drainage plan to the local flood control agency or other jurisdictional agency for review and approval
4. The applicant will be advised that Bernalillo County will not further review and will not issue the wastewater system permit until such time as the local flood control or other jurisdictional agency has accepted the plan, and such acceptance is received by the County in writing.
5. It is the applicant's duty to submit the plan to local flood control agency or other jurisdictional agency and ensure that the agency provides the acceptance letter, encroachment agreement, or other similar documentation to the County for inclusion in the wastewater permit application and variance permit.
6. If any portion of the wastewater system is to be located within the floodplain, whether under local flood control agency or other agency jurisdiction, the minimum provisions/conditions for the variance will be provided to the applicant as review comments/conditions and for information for the local flood control agency if applicable, and shall include that:

7) The setback distances of Section 511, Table 7 of this division will be maintained for all features if not related to drainages and arroyos, unless specifically varianced as part of the application.

8) Tank and/or treatment unit and treatment components

i. The tank and/or treatment unit(s) regardless of location, will at a minimum meet the applicable requirements of Section 42-508(a) and (c).

ii. The treatment unit/tank will be not be located in the floodplain or drainage easement unless such placement is unavoidable, and shall require explicit approval of the County, and if applicable with the joint approval of the local flood control agency or other jurisdictional agency. However, it may be located within any raised building pad area such that it is removed from the floodplain and meets other ordinance setback requirements.

iii. If the approved tank location is within the designated floodplain, the seal line between the lid and the tank or treatment unit and/or point of riser connection or other access, shall be elevated 1 foot or more above the specified flooding depth (specified in feet on the county insurance rate map or by zone definition), or at least two feet above the base flood elevation if no flooding depth is provided.

iv. a stamped engineering calculation shall be provided certifying that the tank is appropriately anchored against flotation and is of sufficient strength and design to resist related floodwater pressures and anchoring stresses.

v. The variance will also include:

jjj) conditions that the access port risers shall include floodproofing to include, at a minimum, a neoprene gasket to ensure sealing of the access riser covers, extension of the access risers as appropriate and practical to avoid inundation, reinforced as needed to prevent damage by floodwater pressures, and

kkk) sealing of all pipe portals through the tank that is sufficient to provide watertight seals substantially impermeable to the water under related floodwater pressure

i. The variance, at the discretion of the the County Engineer or designee, County Drainage Engineer, of Floodplain Administrator, or the manager of the department or section issuing the wastewater permit, may also include

1. additional tank soil cover and/or additional erosion protection,

2. other such floodproofing provisions as may be determined necessary and prudent by the County.

lll) Disposal and soil treatment components (i.e., disposal distribution piping, distribution boxes, disposal appurtenances, and disposal field and piping) shall

a. not be located within designated surface water retention or detention structures or drainage conveyances to such structures, within incised channels, within active channels or within ditches. Disposal system components shall be located at the maximum possible distance from the centerline of such features.

i. avoid placement in floodways. If such placement is unavoidable, the County shall require that the entirety of the on-site disposal system design be certified by a professional engineer and that the professional engineer oversees and certifies the construction and installation of such systems in accordance with this Division and in compliance with the variance provisions.

ii. will at a minimum meet the applicable requirements of Section 42-508(a) and Section 42-510.

iii. Due to relative risk of flooding compared to operational and maintenance requirements, the visual value in identifying the spatial extent and location of the wastewater system location, and protecting wastewater systems from damage, the requirement for access risers and drainline observation ports will NOT be waived even if located with the floodway, floodplain, or drainage eastement designated areas.

iv. The variance may include

3. additional soil cover and drainfield erosion protection, subject to approval, by the County,

mmm) other such floodproofing provisions as may be determined necessary and prudent by the County.

1. As applicable, the applicant shall also comply with any other agency's requirements regarding flood mitigation or flood protection measures so long as such requirements are not in conflict with County ordinance or permit variances or conditions. Certification, inspection and/or enforcement of external agency requirements remains the responsibility of the specifying agency and not the County.

2. Any other agencies additional requirements shall meet the setback requirements of the ordinance unless specifically addressed by variance, shall not impair the performance of the wastewater system as permitted, and shall be located no closer than 8 feet from the nearest drainline or wastewater system component.

3. Approval for installation, replacement, modification, or repair of an on-site wastewater permit within a floodplain or drainage easement by the another agency shall not bind the County to similarly approve a variance.

4. The system is subject to inspection (as specified in this division and/or under inspection provisions of Chapter 38, and/or evaluation at the owner's expense under the provisions of this Division, if so directed by the County, to ensure a good state of repair and functionality of the wastewater system following a flooding event, including any protective provisions determined necessary and prudent by the County Engineer or designee, County Drainage Engineer, Floodplain Administrator, or the manager of the department or section issuing the wastewater permit or as so directed to ensue compliance with another jurisdicational agency requirements.

(e) Graywater Systems Discharging Less than 250 gallons per day

Graywater discharges of less than 250 gallons per day, including laundry-to-landscape diversion, of private residential graywater originating from a residence for the resident's household flower gardening, composting or landscaping irrigation shall be allowed by variance permit if:

(1) Graywater does not create a public nuisance, is discharged in a manner that minimizes the potential for contact with people or domestic pets and does not run or migrate across the property lines;

(2) The discharge system does not involve a pump tank and/or pressurized dispersal system and the system is maintained in accordance with a homeowner maintenance and inspection plan provided to the County as part of the variance request, including maintenance of the source piping, disposal system, disposal area and replacement of disposal bedding materials;

(3) The graywater system is sited outside of a floodplain; is not discharged nor drains to drainage, arroyo or stormwater system, graywater is not discharged closer than 100 feet to a watercourse or private domestic well, or closer than 200 feet to a public water supply well; the point of discharge maintains setbacks of Table 7 except as otherwise exempted for graywater discharge elsewhere within this ordinance; and discharge is vertically separated at least four feet above the ground water table;

(4) A constructed graywater distribution system provides for overflow/diversion into the sewer system or on-site wastewater treatment and disposal system; and graywater pressure piping is clearly identified as a nonpotable water conduit;

(5) Any required graywater storage tank / trash filter canister is covered to restrict access and to eliminate habitat for mosquitoes or other vectors; and graywater is not stored longer than 24 hours before being discharged;

(6) Graywater is not spray irrigated and is not used to irrigate food plants except for fruit and nut trees;

(7) Graywater is used on the site where it is generated, is not allowed to pond and is managed to minimize standing water on the surface and discharge does exceed the hydraulic capacity of the site soil,

(8) Graywater will at a minimum be filtered for solids and non-liquid materials prior to discharge, either in line, or at the point of discharge.

(9) Discharge will be to a designated disposal area, trench, or planting bed designed and documented based on the requirements of Sec 42-510 (a) through (d), (h), and (l) or as otherwise approved by the County.

(10) All piping and valve boxes used for graywater transfer and piping shall be clearly marked, taped, painted, or otherwise designated as "purple pipe", and disposal beds and trenches shall likewise be signed or designated as "graywater/ reuse water disposal bed".

(f) Portable Toilets

(1) Temporary use of a portable toilet for less than 30 total days as a result of revoking conditional approval, or more than 30 total days and not exceeding 120 total days.

a) Any use will, at a minimum, require an variance permit under this division. The variance presumes that the toilets are maintained in good order, no spills occur, and that waste is properly disposed.

b) The variance shall address maintenance requirements, description of tip prevention that will be used, description of the placement and minimum 15–foot offset from drainages and arroyos, and 50–feet offset from waters of the U.S., an identified point of contact for addressing complaints, and other information requested under this division.The variance will be revoked upon substantiation of a complaint regarding the portable toilet condition and maintenance, or expires at the end of the 120-day period starting with the earlier of the variance permit date or the day of initial placement.

(2) If the variance permit is revoked, then a County holding tank permit must be obtained under this division to allow for continued use of the portable toilet(s) and a holding tank permit fee will be assessed

Sec.42-521 Appeals.

Appeals to issuance of any wastewater permit, variance, exception, revocation of a permit, or enforcement order made under the terms of Chapter 42, Division 10 shall be addressed in accordance with the appeals process identified in Section 42-185 of the Bernalillo County code.

(Ord. No. 2014-17, § 1, 10-28-14; Ord. No. 2018-1, 1-9-18)

Sec. 42-522. - Penalties and enforcement.

(a) Any violation of this division is a petty misdemeanor subject to criminal penalties as authorized by NMSA 1978, 4-27-3.

(b) The county may appear and prosecute any misdemeanor proceeding if the appearance is by an employee authorized by the county to institute or cause to be instituted an action on behalf of the county.

(c) The county, at its discretion, may elect to pursue criminal or civil penalties, or both, for any violations of this division.

(d) The operation or maintenance of any wastewater system, or portion of a system, or any discharge of wastewater in violation of any provision of this division, which causes a nuisance, degrades or threatens to degrade surface water, ground water, or stormwater runoff quality or creates a potential or actual health hazard, and is a public nuisance may be subject to abatement by a restraining order or injunction issued by a court of competent jurisdiction.

(e) The county may contract with a maintenance person to provide services to a property which does not possess a valid maintenance contract and place a lien on the property to recover the county's costs.

(f) The county may contract with a plumbing or septic contractor to repair/replace a failing wastewater system or repair/connect to municipal sewer where sewer is available and place a lien on the property to recover county's costs.

(g) Any person who violates any provision of this division shall be punished by a fine not exceeding $300.00, imprisonment for a term not exceeding 90 days, or both. Each day of violation may be considered a separate violation.

(h) Violations of this division that are continuous with respect to time are a public nuisance and may be abated by injunctive or other equitable relief. The imposition of a penalty does not prevent the granting of equitable relief.

(Ord. No. 2014-17, § 1, 10-28-14)

Sec. 42-523. - Severability.

If any section, paragraph, sentence, clause, word, or phrase of this division is for any reason held to be invalid or unenforceable by any court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions of this division. The commission hereby declares that it would have passed this division and each section, paragraph, sentence, clause, word, or phrase thereof irrespective of any provision being declared unconstitutional or otherwise invalid.

(Ord. No. 2014-17, § 1, 10-28-14)

Sec. 42-524. - Effective date.

This division shall take effect 30 days after final adoption by the Bernalillo County Board of County Commissioners.

(Ord. No. 2014-17, § 1, 10-28-14)

Secs. 42-525—42-540. - Reserved.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF BERNALILLO COUNTY, NEW MEXICO this 23rd day of February, 2021.

APPROVED AS TO FORM

DocuSigned by:
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W. Ken Martinez, County Attorney

BERNALILLO COUNTY COUNTY CLERK SEAL STATE OF NEW MEXICO

ATTEST:

Linda Stover, County Clerk

BOARD OF COUNTY COMMISSIONERS

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